

**THE  
RAILWAY GAZETTE**

A Journal of Management, Engineering and Operation  
INCORPORATING

Railway Engineer • TRANSPORT • The Railway News  
The Railway Times • Herapath's Railway Journal • RAILWAY RECORD.  
RAILWAYS • ILLUSTRATED • ESTABLISHED 1835 • RAILWAY OFFICIAL GAZETTE

PUBLISHED EVERY FRIDAY

AT  
33, TOTHILL STREET, WESTMINSTER, LONDON, S.W. 1Telegraphic Address: "TRAZETTE PABL., LONDON"  
Telephone No.: WHITEHALL 9233 (6 lines)Annual subscription payable in advance and postage free:  
British Isles and Abroad ..... £2 5s. 0d.  
Single Copies ..... One Shilling  
Registered at the General Post Office, London, as a Newspaper

VOL. 73 No. 15

FRIDAY, OCTOBER 11, 1940

**CONTENTS**

	PAGE
Editorials .. .. .	373
The Scrap Heap .. .. .	377
Overseas Railway Affairs .. .. .	378
New Point and Crossing Renewal Method, L.M.S.R. .. .. .	380
Station Names .. .. .	383
New 4-8-4 Type Locomotives, Canadian National Railways .. .. .	384
Railway News Section .. .. .	387
Personal .. .. .	387
Transport Services and the War .. .. .	390
Stock Market and Table .. .. .	396

**NOTICE TO SUBSCRIBERS**

Consequent on further paper rationing, new subscribers cannot be accepted until further notice. Any applications will be put on a waiting list which will be dealt with in rotation in replacement of existing subscribers who do not renew their subscriptions.

Annual subscriptions are payable in advance and subscribers are advised to pay their renewal accounts before the expiration of the existing subscription as the dispatch of copies will in all cases be stopped on expiration

**DISPATCH OF "THE RAILWAY GAZETTE" OVERSEAS**

We would remind our readers that there are many overseas countries to which it is not permissible for private individuals to send printed journals and newspapers. THE RAILWAY GAZETTE possesses the necessary permit and machinery for such dispatch, and any reader desirous of arranging for copies to be delivered to an agent or correspondent overseas should place the order with us together with the necessary delivery instructions.

We would emphasise that copies addressed to places in Great Britain should not be re-directed to places overseas, as they are stopped under the provisions of Statutory Rules & Orders No. 1190 of 1940

**TO CALLERS AND TELEPHONERS**

Our office hours until further notice are:—

Mondays to Fridays - 9.30 a.m. till 4.30 p.m.  
The office will be closed on Saturdays.

**Third Minister of Transport this Year**

THE appointment of Lt.-Colonel J. T. C. Moore-Brabazon as Minister of Transport in the reconstruction of the Government provides the third holder of that office in the current year. As our chronological table on page 377 shows, brevity of tenure has been one of the features of these appointments ever since the office was created in 1919, and in its fourth and sixth years it equalled the present in its number of Ministers. It is only too apparent that this Ministry is regarded by the Government as but a training ground or trial run for men destined for other Departments to which greater importance is attached. In fact it shows the cynical contempt with which politicians of all parties regard public transport. Sir John Reith had been at the Ministry since May only, and could have done little more than settle down in his new surroundings before being removed, with a barony, to the newly-created Ministry of Works & Buildings. It is obviously impossible for transient Ministers to evolve or prosecute a long-term policy such as the complexity of transport in this country so patently demands; in effect the fate of those for whom the Ministry was created to be responsible is left to the discretion of the permanent officials. It is not a state of affairs which engenders confidence in the intention of the Government to deal with the problems of transport, although they have been brought to its notice frequently and emphatically enough to induce it to protest its willingness to find a solution. The failure to grasp the nettle which has characterised a long list of Ministers of Transport may be due to the fact that they have never been permitted to become sufficiently acquainted with it.

\* \* \* \*

**Need for Balance**

For the present Minister of Transport it may at least be said that he has had some previous experience in connection with the office he now assumes, for from 1923 to 1927 he held the office of Parliamentary Secretary to the Minister of Transport. His personal knowledge of transport has been derived largely from his experience as a pioneer motorist and aviator. There is, of course, no question that the personal predilections of any British Minister would be ruled out of consideration in the formulation of any line of action—if indeed any break from passivity were to occur at the Ministry—but it is perhaps pertinent to note that although there have been former Ministers who have had some knowledge of the road industry there has never yet been an attempt to secure the services of one who can pretend to acquaintance with the railways, with the exception of the first Minister, Sir Eric Geddes. The fourteenth holder of the office can hardly hope to take part in the reforms which will doubtless have to be made in the transport system when the war ends, for the most optimistic forecasts of the conclusion of hostilities do not envisage so brief a further period of trial than the span of life to which we have become accustomed for Ministers of Transport. Nevertheless, there is ample scope for the display of his talents in putting in train the preparations against the time when changes will have to be made. More immediately, he will have to face the problems arising from the recent application by the Railway Executive Committee for a further advance in railway charges.

\* \* \* \*

**The Importance of Transport**

The cynical disregard of the importance of British transport, at any rate in its ministerial aspect, is in striking contrast to the recognition by our Royal Air Force of the vital factor of transport in the progress of the war. On Monday last the R.A.F. revealed collated details of its bombing attacks made on Germany and German-occupied territory and stressed the careful plan which lies behind these attacks. More than 700 blows have been struck at Germany itself, from the Baltic Sea to Switzerland, and from the North Sea

hundreds of miles inland to Berlin and beyond, and over 200 military targets are included in what is described as a vast web of destruction woven night after night by our bombers. Goods yards and railway junctions, motor roads, and barges and shipping, rank with oil depots and refineries, armament works, aerodromes, and docks and naval bases, among the chief objectives of these bombing attacks. In fact, the R.A.F. designates the disorganisation of German transport as "a primary object in our attack." It is unnecessary here to detail the principal points of attack and the frequency of R.A.F. visits to them, as much of this was included in our own review of September 27 at page 339. It is significant that Hamm marshalling yard has received more frequent attention from the R.A.F. than anywhere else in Germany.

\* \* \* \*

#### P. V. McMahon

With regret we record in our personal columns this week the death of Mr. P. V. McMahon, for many years engineer to London's first tube, the City & South London, opened on December 18, 1890. He had thus lived not quite long enough to see its 50th anniversary. Associated with it from the beginning, he became Chief Engineer at the early age of 28, and to his energy, capability and resource its success was in no small measure due. His exhaustive experiments with three of the locomotives, leading to the development of an excellent design long in use, and his remarkable application of the 3-wire system to traction on the opening of the Moor-gate and Clapham extensions in 1900, on both of which he read valuable papers before the Institution of Electrical Engineers, to mention only two of his numerous activities, mark him an outstanding figure in the creation of the London underground electric lines. His name will remain inseparably associated with those of Greathead, Mott, and the Hopkinsons who, in co-operation with Messrs. Mather and Platt, gave London its first electric train under the Thames just half a century ago.

\* \* \* \*

#### Federated Malay States Railways

There was a marked improvement during the later months of 1939 in the goods traffic of the Federated Malay States Railways. This was caused by the arrival of large stocks of commodities ordered before the outbreak of war and by the increased quotas for tin and rubber. Revenue from rubber for the whole year 1939 amounted to \$847,723, an increase of \$89,054 or 12 per cent. in comparison with 1938, and the receipts of \$413,365 from tin and tin-ore showed an improvement of \$74,788 or 22 per cent. Goods traffic revenue for the year, apart from livestock, amounted to \$7,036,813, an increase of 1.3 per cent., and the tonnage of 1,860,165 showed an improvement of 0.6 per cent. Poor trading conditions prevailed in Malaya during the first half of the year, which accounts for the comparatively small improvement during the full twelve months. Passenger traffic was the heaviest since 1930 notwithstanding the decrease in tourist traffic resulting from the disturbed political situation throughout the world, and the number carried was 11,462,802, an increase of 1,540,114 in comparison with 1938. The passenger revenue of \$4,365,175 was, however, \$46,614 less than in 1938, because of the larger proportion of week-end and other cheap tickets issued. Total revenue from railways and road services was \$13,449,412, an increase of \$92,339 or 0.7 per cent. In the expenditure of \$11,926,712 the net increase of \$257,776 or 2.2 per cent. was caused mainly by flood repairs, additional train mileage, and higher costs of materials.

\* \* \* \*

#### Railways Help with the Mail

The disorganisation of postal services to which we referred in THE RAILWAY GAZETTE of September 27, which was brought about by the extreme caution with which the Post Office greeted the earlier air attacks on London, resulted in an awakening on the part of certain enterprising business people to the facilities which the railways offer in the way of transport of mail. As we then showed, Post Offices closed with the first sound of the warning siren, notwithstanding the endeavours which were made by the business community,

in response to official exhortations, to carry on. Since then there has been a good deal of improvement, and the dislocation to trade which must inevitably result from interrupted or restricted postal services has been lessened. Letters in some instances still seem to take an inordinate time to make a relatively short journey, but in these times there may be other reasons for this than the closure of offices during raids. During the worst of the period of postal delay, some business men took advantage of the fact that their letters could be handed in at any railway station and sent by passenger train to other stations on the line there to await collection. Alternatively, it could be posted by the railway representatives at the town of destination. The cost is greater than the normal postage, in order to preserve the Post Office monopoly, but in times of stress the comparative certainty of early delivery makes the service attractive to those willing to make the necessary arrangements with their regular correspondents. It has been found particularly suitable for use between an office in town where only a skeleton staff is maintained and the evacuated headquarters or branches in the country.

\* \* \* \*

#### Advantages of Small-Capacity Wagons in War

In peacetime traffic conditions there is no doubt that from the railway operating point of view the advantages of the large-capacity wagon are considerable and make for ease and economy in working. In this country efforts have been made for many years to stimulate the use of 20-ton wagons, and it has been found possible to offer traders attractive rates for their utilisation in an endeavour to woo them from their traditional predilection for smaller vehicles. In the United States wagons of a capacity far in excess of those normally used in this country are common, and 70-ton wagons are not exceptional. In wartime, however, other considerations prevail, and it is interesting to note, in our contemporary the *Railway Age*, a claim for many small-capacity wagons against fewer larger units. Lt.-Colonel L. Alfred Jenny, Consulting Engineer on Transportation, shows that for moving stores and ammunition towards the front line it is necessary to use smaller units so as to permit the sidetracking of these supplies wherever the units are located and to permit them to handle their own supply from the railhead. In the last war the American Expeditionary Force found the 30-ton wagon well suited for the purpose, but since then the army has been planning on using 20-ton wagons. He declares that 50,000 50-ton wagons would be hardly any more useful than a like number of 25-ton or 30-ton wagons; in fact the heavier wagons would only be half full and their handling would entail a good deal of dead weight tonnage.

\* \* \* \*

#### New Methods of Point and Crossing Renewals

Attempts to increase the speed of track renewals, particularly at junctions, have given rise to the exercise of considerable ingenuity, mostly connected with the equipment used in the work of removing the old material and laying in the new at the site. An important development which has been adopted for the past two years by the L.M.S.R., and is described on page 381, is concerned with the perfecting of preparations for the work at the site by completely assembling and marking the layout beforehand, so as to reduce to the very minimum the work to be done when the material is laid in the track. So far as possible, all point and crossing work is built up complete with chairs, timbers and fittings, in a layout yard, and special comprehensive marking is adopted whereby the material upon delivery to the site of the renewal can be quickly and accurately assembled. Already more than fifty layouts have been installed on this system on the L.M.S.R. with considerable economy and completely satisfactory results. Practically all junction work in main lines on the L.M.S.R. is now laid with transitioned curves and two-level chairs, which enable cant to be given to the curved lines, and for these refinements the new method of assembly is of particular value. In the final result, not only is economy achieved in the renewal work, but, because of the accuracy of the job and its scientific alignment, maintenance costs are lessened, and traffic is speeded up.

### Maintaining the Lines in Air Raids

**D**URING the past few weeks the attacks of German aircraft upon London, its suburbs, and the districts to the south and east have given scope for the display of initiative and ingenuity on the part of the railways. So far as the engineers are concerned, what has been accomplished in the way of rapid restoration is extremely creditable, and speaks well not only for the enterprise of individuals in the engineering departments when faced with emergencies, but also for the preparatory measures which had been taken by the railways in anticipation of troubles the exact nature of which could, of course, not be foreseen. When the appropriate time comes for the full story to be written, it will make illuminating and instructive reading, but, in the meantime, it is obviously impossible to give anything more than a very general outline of some of the more remarkable feats accomplished. The easiest type of damage to repair is, of course, the straightforward bomb crater. Where a bomb falls clear of the tracks it may affect their alignment and level and cover them with debris. The adjustment is then merely a matter of clearing, and re-establishing correct line and level. As, of course, the tracks affected cannot carry traffic in the meantime, the work can proceed without interruption, and traffic may be re-established within a matter of hours. Should a bomb fall upon the track it may cause more damage, and necessitate the bringing to the site of material for filling the crater, and relaying the damaged lines. Cables, both traction and signal, and conductor rails, not to mention telephone wires, may have been damaged, and these also have to be repaired. Traffic may, however, be resumed under hand-signalling, pending the re-establishment of the normal controls.

Another type of bomb which may cause but small damage immediately is the delayed-action bomb, but in many cases this can be extracted and removed for detonation at a safe distance. In other cases it must be given time, and may or may not explode upon the site, causing more or less damage. The demolition of buildings near the line by high explosive bombs presents, as a rule, no very great problem beyond the clearing of the debris, and any necessary restoration of the tracks if they have been damaged. Where buildings have been damaged so as to be a potential danger to the line, temporary withdrawal of train services has been necessary until the building could be rendered safe by complete demolition or otherwise. Station buildings, including platforms and platform roofing, have been the victims of aerial bombardment, but restoration has been astonishingly rapid, and in some cases train services only slightly interrupted thereby.

The greatest problems, both in nature and magnitude, have, of course, been presented by damage to bridges and viaducts, and the ingenuity displayed in devising means of restoration, as well as the concentrated hard work which has gone to its realisation, has astonished many who have had the opportunity of seeing what has had to be tackled. Two widely-differing instances may be mentioned. In the first, a bomb hit the top boom of a large-span single-line bridge, causing a certain weakening of the whole structure. Calculation made immediately after observation and measurement of the deformation showed, however, that electric train services at reduced speed could safely be re-established without any repairs whatever being put in hand, the bridge having been calculated originally for the carriage of heavy steam locomotives. Incidentally, this may be written-up as an advantage of multiple-unit electric traction, with its comparatively light axle loads. The other instance is of a viaduct over 100 ft. wide supporting a multiplicity of running lines carrying an intensive traffic. Here the bomb fell in a space between the tracks, leaving the lines themselves completely undamaged. It penetrated through the brick arch, and exploded with great violence, wrecking several arches and shattering the piers for a considerable distance. So violent, indeed, was the explosion that buildings within a large radius were badly shattered. It was, of course, necessary to suspend traffic on all lines, and it was decided that the quickest method of restoration was to build retaining walls at each side of the viaduct, demolish the worst of the wrecked masonry, and fill in and consolidate the whole formation. The problem of furnishing filling was quickly solved by the provision of

trains of hopper wagons containing quarry refuse consisting of small stone chippings from a convenient stone quarry. This material packs quickly and solidly, is easy to handle, and can be supplied in unlimited quantities. Two of the tracks were reopened to traffic within eight days, and two more within another couple of days. An awkward piece of damage was inflicted on a large girder bridge carrying one main line over another. The bomb in this instance fell near the end of one of the main girders, demolishing the bedstone, and causing other—fortunately local—damage. The load was transferred to the upright next to the end of the girder, a new bedstone placed upon that part of the abutment which had not suffered damage, the debris cleared from the line below, and traffic re-established over the bridge within two days.

The restoration of train services has in some instances been made possible with a minimum of interruption by temporary trestling where underbridges have been damaged, and it has been rare that any extensive regirding has had to be done before a line could be reopened. Here and there fire has been a trouble, and there is an instance of an important station carried on a steel viaduct, in which the terminal ends of all but one platform were badly damaged before the conflagration could be extinguished. Trains which were standing at the platforms at the time were attacked by the flames. All but one were removed before extensive damage had been done, but one of them, with wooden-centred wheels, which, when burnt, let the axles drop, became immobilised, and the vehicles next the buffer stops were totally demolished in the flames. The scene immediately after this fire was one of desolation, but, nevertheless, so quickly and methodically was the wreckage handled that within 48 hours it was possible to work trains in and out of one platform. Five days later two more platforms were again in use, providing sufficient accommodation for the traffic, which, owing to war conditions, was, in any case, considerably reduced.

\* \* \* \*

### New Zealand Government Railways

**R**ECORD gross earnings of over £10,000,000 were secured by the New Zealand Government Railways during the year ended March 31, 1940. The administration, besides working the railways, conducts a number of subsidiary businesses such as Lake Wakatipu steamers, road motor services, refreshment, bookstall, and advertising services, departmental dwellings, etc. These businesses produced in the year under review a gross revenue of £1,437,433, against £1,340,328 in the previous year, and made with the railway operating earnings, total gross earnings of £10,199,070. Gross expenditure on all services was £9,010,039, or 88.34 per cent. of gross revenue, leaving net earnings of £1,189,031, which represent a return of 1.96 per cent. on capital. Interest charges at 4½ per cent. were £2,575,196, leaving £1,386,165 excess of interest charges over net revenue, compared with £1,717,053 at the end of the previous year. Figures in the accompanying table refer to railway operations only:—

	1938-39	1939-40
Miles open	3,319	3,390
Train-miles	13,072,615	13,366,798
Passengers, ordinary	7,813,436	8,283,067
Goods tonnage	6,917,257	7,077,298
Operating ratio, per cent.	95.73	90.66
	£	£
Passenger receipts	1,785,646	2,119,335
Goods traffic receipts	5,694,936	6,109,293
Operating earnings	8,005,059	8,761,637
Operating expenses	7,663,632	7,943,120
Net earnings	341,427	818,517

Among the factors assisting the increase of £333,689, or 18.69 per cent., in passenger revenue was the 10 per cent. increase in fares which was operative throughout the whole of the financial year compared with only four periods of the previous year. Two Easter holidays fell in the year under review and considerable additional revenue was produced by the holding at Wellington from November 8, 1939, to May 4, 1940, of the Centennial Exhibition to mark the centenary of New Zealand, which was celebrated on February 4, 1940. Restrictions placed on the use of petrol by road users, mobilisation of the fighting forces, week-end leave from camps, etc., also aided passenger revenue during the last seven months of the financial year. On the other hand, the inter-



national situation deterred many people from visiting the Centennial Exhibition, and much potential revenue was lost to the railways as a result. Revenue from ordinary passengers was £1,844,789, an increase of £305,908 or 19.88 per cent., and the season ticket revenue of £274,546 showed an advance of £27,781 or 11.26 per cent. One-class accommodation of a new standardised type had been adopted in the previous year on the Wellington suburban line and this was extended during the year under review to the Auckland suburban trains. Receipts from goods and livestock were the highest ever recorded, and were £414,357 or 7.28 per cent. more than those for 1938-39. They benefited from the 10 per cent. increase in rates which was operative from December, 1938. Tonnage of goods apart from livestock increased by 160,041 tons, or 2.31 per cent. The average haul for the year was 75.68 miles.

In the North Island the main line between Plimmerton and Paekakariki (except for the  $1\frac{1}{2}$  miles tunnel section) has been duplicated, and double-line working between those points was brought into operation as from February 25, 1940, and centralised traffic control in this area was introduced at the same time. An important development north of Auckland was the linking up of the Dargaville (Kaihu) section with the North Island system. The Parnassus—Hundalee section (12 miles) on the South Island main trunk railway was opened on November 27, 1939, for goods traffic, and December 11, 1939, for passenger traffic. The Napier—Wairoa—Waikokopu (97 miles) portion of the East Coast railway, opened on July 1, 1939, has been doing satisfactory business. At the end of the financial year railcar services were being operated on five routes, with a total route-mileage of 542,549. These services have, generally speaking, been well supported. Of the fifteen railcars now in service, four are petrol-engined and the remainder diesel-engined. Two petrol units were converted to diesel operation during the year.

Operating revenue from branch lines amounted to £407,920, as against £379,911 in 1938-39. Operating expenditure, amounting to £575,282, increased by £17,648. After allowing for the main-line feeder value of branch-line traffic, the operating loss on branch lines was £103,802. As at March 31, 1940, there were 627 locomotives in service—608 steam and 19 electric. At the close of the year a total of 47 locomotives was on order or under construction in workshops. New carriages built in workshops and placed in service during the year totalled 56.

\* \* \*

### The Growing Power of Bureaucracy

THE war has caused wide changes in the personnel of the Government and the qualifications which had come to be considered prerequisites of Ministers of the Crown. One feature which has marked our Administration for the last twenty-one years still remains—the frequency with which Ministers of Transport take and are removed from office. Since that Ministry was formed in 1919 there have been 14 holders of the office, and 1940 shares with 1922 and 1924 the distinction of having had three persons successively representing the Department in Parliament. On another page we deal briefly with some of the disadvantages of the brevity of tenure which seems to have become inherent in Ministers of Transport, but there are wider considerations which merit more detailed attention. The value of introducing new blood into any Administration can seldom be questioned; in the past there has been considerable criticism of the limpet-like characteristics which have been attributed to certain prominent politicians who did not seem to possess even the second of the qualities of the legendary old soldier.

The war has been largely instrumental in forcing the Government to seek suitable recruits from outside the ranks of the professional politicians, and, since in these days politics and commerce are often inextricably interwoven, or the effects of the former are so directly related to the latter, prominent business men have acceded to the Cabinet without the usual preliminary sojourn on the back benches of the House of Commons. The introduction of competent and successful business men has been found desirable at a time when the work of certain departments has been recognised to be as much commercial as political, and only by this means

can the necessary skill, experience, and rapidity of action to ensure success be achieved. The repercussions on the long traditions of the Civil Service of the prompt decisions and cutting of red tape which must necessarily be demanded by such men as Sir Andrew Duncan, the Minister of Supply, and Mr. Oliver Lyttelton, the President of the Board of Trade, may be far reaching. That in times of grave emergency the Government should call on the services of industrial leaders is at once a tribute to the new flexibility of our governmental system and a condemnation of the previous adherence to selection on purely political considerations. If an analogy may be drawn, it may be noted that in many another country Ministerial and, perhaps more particularly, Ambassadorial posts are frequently filled by men who have achieved success in industry and commerce.

Frequent shifting of Ministers, however, necessarily tends to leave the administration of a country in the hands of the permanent officials and to vest in them a power far wider than is generally recognised. Lord Hewart, who has just retired from the Lord Chief Justiceship, drew attention to some of the dangers of this development in his book "The New Despotism." He pointed out that it was one thing to confer power, subject to proper restrictions, to make regulations. It was another to give those regulations the force of a statute. It was one thing to make regulations which were to have no effect unless and until they were approved by Parliament; another to make regulations, behind the back of Parliament, which came into force without the assent or even the knowledge of Parliament. Again, it was a strong thing to place the decision of a Minister, which in effect meant some official in his Department, in a matter affecting the rights of individuals, beyond the possibility of review by the Courts of Law, and equally so to empower a Minister to modify, by his personal or departmental order, the provisions of a statute which has been enacted. Pointing out how widely legislation may be drawn so as to place great power in the hands of the Departments, Lord Hewart gives a number of examples from Acts under which the Minister of Transport may take action. Under Section 10 of the London Traffic Act, 1924, for instance, the Minister was given power to make regulations to have effect in the London Traffic Area for relieving and facilitating traffic in and near London. Such regulations might provide for the suspension or modification of any Acts of Parliament, bye-laws, or regulations dealing with the same subject-matter as the regulations made by the Minister, or of any Acts conferring power of making bye-laws or regulations dealing with the same subject-matter. Sub-section (6) declared: "The making of any regulations under this section shall be conclusive evidence that the requirements of this section have been complied with."

At the present time in particular it is undesirable that bureaucracy should hold sway at the Ministry of Transport, but the frequent change of Minister has rendered it inevitable. The result is that at a time when controversy is rife as to the merits of the financial agreement with the railways, and when there is widespread opposition to the increases in charges which have to be made from time to time under Clause 10 of that arrangement, no Minister is in the saddle long enough to familiarise himself with the many-sided aspects of railway control. It necessarily falls to the permanent officials of the Ministry to deal with all questions as they arise, and the Minister becomes wholly dependent on the advice they tender him and the decisions they make. In such circumstances the Parliamentary chief of a Department becomes but a figure-head and the mouthpiece of his subordinates. In facing the House of Commons he can but reiterate the views of his officials, and it must become ever more difficult for him to gain an effective hearing in his own department for any policy which he himself may wish to pursue. Ultimately it reduces to a farce the popular impression that the Minister is responsible to Parliament and, through it, to the public for the deeds and omission of his officials. This is particularly so with the modern system of collective responsibility of Ministers and the tendency to make every issue of any importance a matter of confidence in the Government as a whole and to put on the Whips for any major division in the House. If bureaucracy is to be supreme it would be better for the development to take place openly than for it to grow up without public cognisance or acquiescence.



## THE SCRAP HEAP

### FOURTEEN MINISTERS OF TRANSPORT

Sir Eric Geddes	1919-1921
Viscount Peel	1921-1922
Earl of Crawford	1922
Sir John Baird	1922-1924
Harry Gosling	1924
Rt. Hon. Wilfred Ashley	1924-1929
Herbert Morrison	1929-1931
P. J. Pybus	1931-1933
Hon. Oliver Stanley	1933-1934
L. Hore Belisha	1934-1937
E. Leslie Burgin	1937-1939
Captain Euan Wallace	1939-1940
Sir John Reith	1940
Lt.-Colonel J. T. C. Moore-Brabazon	1940-

### MINISTER OF TRANSPORT ON TRANSPORT

The following are extracts from an article entitled "Gulliver's Return," by Lt.-Colonel J. T. C. Moore-Brabazon, M.C., M.P., in the October issue of *The Model Railway News*—

Before the last war my brother-in-law and myself built a very elaborate 2-in. gauge railway. . . . Later there has come over me a very bad attack of model railwayitis. . . . I notice the complete disappearance of the 2-in. gauge; it is looked upon now as if it were practically full size and that you earned dividends by hauling minerals. . . .

I come under this category [scenic enthusiast]. I think there is something very beautiful about an express locomotive hauling a big train going through the lovely scenery of England. . . .

My feelings are somewhat like the story of the girl on the railway station saying to her nurse as she viewed an aeroplane, how much she would like to travel that way, to which she got the crushing reply, "you are to go by train as nature meant you to."

I do not believe the attraction of the model railway has ever been extolled seriously from its psychological point of view. After all, it is no good attacking people because they amuse themselves with something that is not useful.

I notice that, in referring to the record of Lieutenant-Colonel J. T. C. Moore-Brabazon, who has just been appointed Minister for Transport in England, most people appear to have forgotten that this is not the first occasion on which he has served under Mr. Winston Churchill.

He was Parliamentary Secretary to Mr. Churchill when the latter was Secretary of State for Air in 1923. Later in the same year he became Parliamentary Secretary at the Ministry of Transport, where he remained until 1927.

Although he is the son of the late Lieutenant-Colonel J. A. M. Moore-Brabazon, of Tara Hall, County Meath, I do not believe that the new Minister for Transport has visited Ireland very frequently.

Aviation and motoring are his chief interests, and recently, when purchasing a new car, he secured the registration

letters FLY-1—a fitting reminder that he was the first British subject to fly in England, and is the holder of the first "Aviator's Certificate" issued by the Royal Aero Club, of which he later became chairman.—*Quidnunc writing in the Irishman's Diary of "The Irish Times."*

### NATIONAL SAVINGS ON L.N.E.R.

There are now nearly 158,000 National Savings groups in the country and of these no fewer than 1,350 are on the L.N.E.R. Total membership of these railway groups is over 43,500, and the L.N.E.R. aims to enrol every employee as a member.

Mr. William Henry Davies, often called the "tramp poet," died on September 26 at his home at Nailsworth, Gloucestershire, at the age of 69. Mr. Davies's "Autobiography of a Super Tramp" told the story of his early life and gave many interesting sidelights on the art of the hobo in the U.S.A. In fact, he covered thousands of miles on the American continent over a period of six years by begging, illicit riding on freight trains, and doing occasional jobs of work as they cropped up. While on his way to the Klondyke in 1901 he was attempting to board a moving train when he fell and a wheel severed his right foot at the ankle. Later he had to have his leg amputated at the knee. It was after this episode that Mr. Davies turned his attention to writing, both poetry and prose. One of his poems contains two lines that are by way of becoming proverbial, and are certainly not inapt in these days of sirens—

"What is this life if, full of care  
We have no time to stand and stare"

It was an overnight journey by train from Penang to Kuala Lumpur, known locally as K.-L., the capital of the Federated Malay States. I thought travel in the United States was comfortable, but it did not compare with that of Malaya. For half a crown I could acquire a compartment with a bed,

screened windows, shower bath, fans, and running water.—*From "A Doctor's Odyssey," by Victor Heiser.*

### S.R. SPITFIRE

The first railway to send a cheque for £5,000 to the Minister of Aircraft Production for a Spitfire is the Southern Railway. All ranks of Southern railwaymen and women from directors to signal box lads and members of associate companies have subscribed to this fund. The plane is to be named the *Invicta* after the first engine on the Canterbury & Whitstable Railway in 1830, which became the fore-runner of the S.R. system. This name has also been used for Southern cross-Channel steamers.

A railway which is only 8½ miles long and employs nine men is still paying a dividend of 5 per cent. to its shareholders, though it runs only one goods train a day, between Manchester and Oneida, Iowa, according to a recent British United Press message. Two locomotives—one built in 1884 and the other in 1886—are used on the line, and the only passenger coach was abandoned in 1932. A wagon is now used to carry passengers (if any), goods, and mail.

### TROOPS BY RAIL IN 1840

Vienna, September 9.—Last week a trial was made to convey troops by the railway. 800 chasseurs, with arms and baggage in 33 wagons, drawn by a single engine, were conveyed in eight hours from Ilradish to Brunn, a distance of seven or eight days' march, so that the battalion travelled by the railway as much as a day's march in an hour.—*From "The Glasgow Herald" of 1840.*

### "VISIT GERMANY"

Advertisement seen yesterday in a coach of an L.N.E.R. train from Epping to Liverpool Street: "The Continent via Harwich. Flushing daily, Hook of Holland nightly." This invitation is flanked with large pictures of Munich's main square and the Brandenburger Tor, Berlin.—"Peterborough" in *"The Daily Telegraph"* of October 2.



Right: A novel window poster posted by London Transport last week on its buses

## OVERSEAS RAILWAY AFFAIRS

(From our special correspondents)

### SOUTH AFRICA

#### The Largest State Undertaking

Mr. F. C. Sturrock, Minister of Railways & Harbours in a recent broadcast talk gave a brief résumé of the activities in the war of this, the largest State undertaking in the Union. With a total staff, in round figures, of 120,000, the railways are not only the largest employers of labour in the country, he said, but are responsible for the livelihood of approximately 10 per cent. of the total white population. Notwithstanding a heavy depletion of staff and many exceptional calls upon their organisation, they are meeting without difficulty the demands of an ever-increasing traffic.

For many years after the decision to leave the gold standard, the phenomenal development of trade and industry in all directions resulted in a strain being thrown upon the resources of the railways that at times involved serious delays and dislocation of traffic. Fortunately the position that was developing was realised in time, and a few years ago a courageous policy of expansion was adopted. On the Rand alone over £6,000,000, was spent, and new harbour works totalled £9,500,000.

#### Reserve of Resources and Equipment

Thanks to this policy the railways find themselves at present—when their resources are being strained to the utmost and when it is almost impossible to obtain new plant or stores—well equipped with ample engine power and rolling stock and with plenty of up-to-date facilities for handling every kind of traffic offering in ever growing volume.

Despite the present emergency, they are maintaining their activities considerably above normal levels, indicating that the economic life of South Africa is being maintained at a healthy level and that the country's position is thoroughly sound, notwithstanding all the factors of war that beset them.

#### Large Capital Works Suspended

Owing to the need for conserving capital resources and to the scarcity of labour, it has become necessary to suspend a number of large capital works. This step has the advantage that, when demobilisation has to be faced, the railways will have built up a large reservoir of useful works in which men retiring from service can be absorbed. Work on the harbours is, however, being continued at full pressure, as this is a war necessity; there will be no delay in completing these undertakings.

Road motor services are being maintained, but owing to the difficulty of obtaining vehicles, there will be no expansion of them in the meantime, and for similar reasons the airways

services will also remain in suspense for the period of the war.

#### New Revenue Record

A further revenue record has been created. The earnings for the week ended August 24, 1940, totalled £720,265. The previous record of £718,656, was set up in the week ended July 6, 1940.

### INDIA

#### Manufacture of Locomotives : Kanchrapara Scheme Deferred

The Standing Finance Committee for Railways, meeting at Simla on July 1 and 2, considered the proposals of the Railway Board for the manufacture in India of broad-gauge locomotives, having previously studied the report of the two railway officers deputed by the board to examine this matter. These officers had recommended that the existing locomotive workshops at Kanchrapara on the Eastern Bengal Railway should be released for conversion into locomotive manufacturing shops. The Railway Board informed the committee that, in consultation with other technical experts, it had considered this recommendation, and that the conversion and the distribution to other workshops of the work now done at Kanchrapara would be practicable. Owing, however, to the war, it had become impossible to obtain the necessary supplies of plant, machinery, and machine tools. The board had placed all its spare shop capacity at the disposal of the Supply Department for the manufacture of munitions. The shops so transferred included the Kanchrapara shops and arrangements had been made to transfer the periodical and other repairs of locomotives from these shops to Kharagpur and Jamalpur. It was accordingly explained to the committee that the manufacture of broad-gauge locomotives would be taken up after the war. The arrangements made at Kanchrapara would leave the shops available for the manufacture of locomotives when the demand for munitions ceased.

#### Engine Building at Ajmer to Continue

It was, however, proposed to undertake the manufacture of 20 small locomotives for the North Western Railway in the B.B. & C.I. locomotive workshops at Ajmer, and steps were being taken, as recommended by the two officers in their report, to keep the latter workshops working to capacity.

#### Increase of Line Capacity on E.I.R.

Among other proposals considered by the Standing Finance Committee for Railways at its recent meeting in Simla, was one for the construction of an additional track between Khana and Ondal stations on the East Indian main line. This scheme which is estimated to cost

about Rs. 19 lakhs, is designed to facilitate the movement of traffic during the busy season by providing an additional running line. It is understood that the first stage of this work has been approved by the committee.

#### Puri Car Festival

The Car Festival at Puri on the Bengal-Nagpur Railway is due to begin on July 7, but, unfortunately, the railway has been breached near Bhardrak station and through communication with Puri is suspended. Usually some 50,000 pilgrims visit Puri on the occasion of this festival, but the traffic this year is expected to fall very far short of expectations on account of the absence of through communication with Calcutta and of reports of an outbreak of cholera in the Puri district.

### CANADA

#### Heavy Increase in Pulp and Paper Products Traffic

Pulp and paper and pulpwood freight loaded on Canadian railways during the current year up to August 31 shows an increase of 47,814 cars over the corresponding period a year ago. This represents nearly one-third of its total increase of all freight loaded by the railways this year. To the end of August, 91,845 cars of pulp and paper products were loaded, as against 64,565 cars to September 2, 1939, and 59,793 cars to September 3, 1938. Improvement in pulpwood loaded also has been pronounced, loadings for the current year amounting to 58,044, as against 37,510 for the like period in 1939.

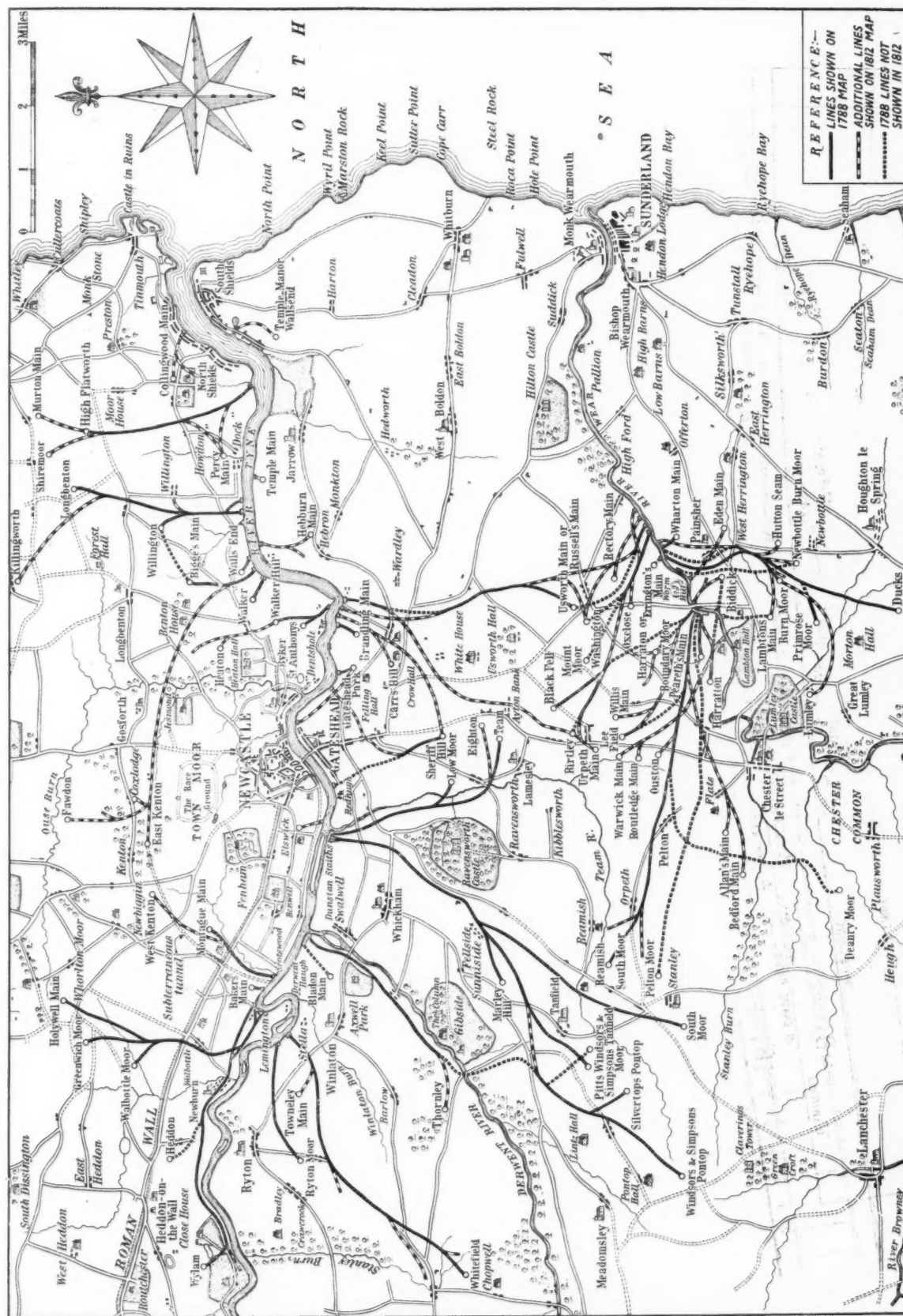
### VICTORIA

#### Trucks for Wood for Pulping

Australian Paper Manufacturers Limited is now receiving monthly some 600 tons of scrap ply-wood and softwood timber at its mills at Maryvale by rail. This light but bulky material makes economical loading in standard trucks impossible, only about five tons being accommodated in a 16-ton truck. To meet this difficulty, the Railway Department has arranged for 45 of these trucks to be fitted with a 4-ft.-high frame in extension of the side and end body plates. Four 4-ft. steel sheets with framing and stiffeners rest on the truck sides and interlock with a hinged wire fence of the same height on each end of the truck. The capacity of this type of truck has been increased 70 per cent. by this method.

#### Buffet Replaces Dining Car on Overland

Poor patronage of the dining car on the Overland express and of the buffet car on the Melbourne—Port Fairy line, has induced the Commissioners to withdraw the former vehicle and transfer the buffet car from the Port Fairy line to replace the dining car on the Overland. The late departure time of the Overland, 7 p.m., probably accounts for the relatively small patronage of the dining car.



Map showing the development of colliery railways in the Tyne and Wear neighbourhood between 1788 and 1812. The details of the lines in 1788 are taken from a "Plan of the Collieries on the River Tyne and Wear, taken from actual surveys by John Gibson, 1788."





## NEW POINT AND CROSSING RENEWAL METHODS, L.M.S.R.

*Important economies in the time of track occupation for renewals, as well as in other directions, have been effected by a novel system of pre-assembling complicated point and crossing work*

A NEW system of laying out complicated point and crossing work preparatory to its installation in the track has been in operation by the London Midland & Scottish Railway since 1938, with resultant considerable economy in the time of track occupation required.

The principle of the method may be gathered from our illustrations of a typical layout. It consists essentially in

work is the result, with a corresponding reduction in the time of track possession required, and an assurance of absolutely accurate work. The last-mentioned advantage has assumed particular importance with the improvement in the design of point and crossing work, with transitioned curves and two-level chairs, which allow of cant on the curved track.



*New point and crossing work laid in the track on the L.M.S.R.*

laying down the whole of the new work in the manufacturer's yard, where all timbers and sleepers are numbered and marked in such a way that they may be dismantled, loaded, unloaded, and installed in the track in precisely the same relative positions they originally occupied. White lines are marked on the timbers (which of course are black as the result of creosoting) to connect with the survey lines on the site of the renewals. In addition, long wooden laths are nailed along the timbers on the outsides of the rails with markings on them which correspond to those on the timbers, thus enabling the latter to be located and laid on the site in their proper positions upon which the ironwork is readily fixed. As many as possible of the chairs are fixed permanently at the assembly yard, but, where it is not possible to have them fixed, the felt pads are nailed on to the timbers and marked clearly with white paint round the edges, so that the chairs can be placed immediately at the site. To guard against the possibility of the white survey lines on the timbers becoming obliterated, three short galvanised nails with broad heads are driven into each timber along these lines.

Thus, most of the work which in earlier years was carried out at the site of the renewals is now done in the assembly yard, and a great increase in the speed of the actual renewal

The new system was devised in conjunction with Taylor Bros. (Sandiacre) Ltd., Nottingham, in whose yard the first layout was assembled in early 1938. Since then over 50 layouts, some of them of considerable complication, have been assembled in Taylor's yard at Sandiacre, a number which by now would have been greater but for war conditions.

A factor commending this method is that the chairing and timbering of the work is undertaken by a few specialists, and there is, therefore, less risk of mutilation of timbers and other units than under the old conditions. The use of specialists has, of course, its further advantage in assuring good workmanship and expeditious work, with corresponding initial and maintenance economies.

### New Indian Air Line

A new weekly service for passengers and mails is reported to have been opened between Karachi and Calcutta at the end of June by Indian National Airways. The route is via Jacobabad, Multan, Lahore, Delhi, Cawnpore, and Allahabad. On the eastbound service from Karachi an over-night stop is made at Allahabad, and on the westbound flight from Calcutta the over-night stop is Delhi.



*Timbers laid out in maker's yard ready for placing iron work and rails*



*Point and crossing work completely assembled in maker's yard preparatory to taking apart for transporting to the site shown in picture on preceding page*

**NEW POINT AND CROSSING RENEWAL METHODS, LONDON MIDLAND & SCOTTISH RAILWAY**  
*(See article on previous page)*



## STATION NAMES

*Recent modifications and improvements**By C. GASEMANN, Public Relations & Advertising Officer, Southern Railway*

THE war has certainly held up the gradual improvement of station name signs, which had been taking place throughout the British Isles, particularly after dark. The necessity of quickly setting down and taking on passengers is particularly apparent where the service is intense, and the stops are of less than a minute duration. It is therefore not surprising to find that London Transport and the Southern, in its electrified area, were more profusely and probably better signed than elsewhere. In both cases recent station layouts have taken the positioning and display of station signs into full consideration.

With the advent of the war, first because of the blackout, and secondly because of possible help to low-flying hostile aircraft and parachutists, the Defence Regulations adversely affected the signing of stations in a wholesale way. The large name boards to be found at every station, lamp signs, and even seat signs all were withdrawn, but the need for civilian life to continue in this totalitarian war prevailed, and certain modifications of the Safety of the Realm Acts were given to railways, as described in an editorial note in THE RAILWAY GAZETTE of October 4. Briefly, these modifications permit signs of most descriptions to be replaced under the covered way, and also on the exposed part of platforms where they cannot be seen from the highway. In the Metropolitan Police Area further special dispensation is granted, and this covers the bulk of the Underground stations.

So far as the Southern Railway is concerned, station name



*Sir John Reith, the late Minister of Transport; Sir Ralph Wedgwood, Chairman of the Railway Executive Committee; and a group of Southern Railway officials inspecting one of the paper seat signs. The new illuminated station sign can be seen hanging above the inspector*

signs are very rapidly being replaced where they come within the new modification. These replacements are as follow:—

- 1.—Large station name signs with 12 or 14 inch lettering—only under station verandahs.
- 2.—Lamp bracket station name signs with 2½ or 3 inch lettering under verandah or where not visible from public highway.
- 3.—Station seat name plates where made of enamel. Also, realising that it will take much valuable time and labour to repaint the other seats, paper labels are being provided with 3 inch lettering at many stations.

4.—Very small new inch letter station labels have also been sent to every station to display on the platform where larger lettering is prohibited. This helpful new arrangement is permitted by the phrase in the regulation which says "can be seen but not understood from the highway."

These four types are the main signs for day use, and on the whole should leave little doubt in the mind of the passenger as to where he is. But when we come to the blackout conditions, we are faced with a much stiffer problem, as the lamp signs, seat signs, and inch signs are in most cases unlit. Apart from the few places where the special subdued lighting permitted shows up some of the daylight signs, the only thing that can be done is to provide stencils in the blacked-out windows of lighted booking offices, waiting rooms, etc. These, however, can be seen only from the few compartments near them, and perhaps from a few other compartments just as the train runs into a station. The problem was, therefore, to find a new method of enabling passengers to locate their stations during the blackout.



*Above: Sir Ralph Wedgwood and Mr. G. Ellison, Chief Engineer, Southern Railway, who is responsible for installing the new lighted station name signs, one of which appears above their heads. Left: Sir John Reith, Mr. R. Holland-Martin, Chairman, Southern Railway, and the writer of the article under one of the new signs*

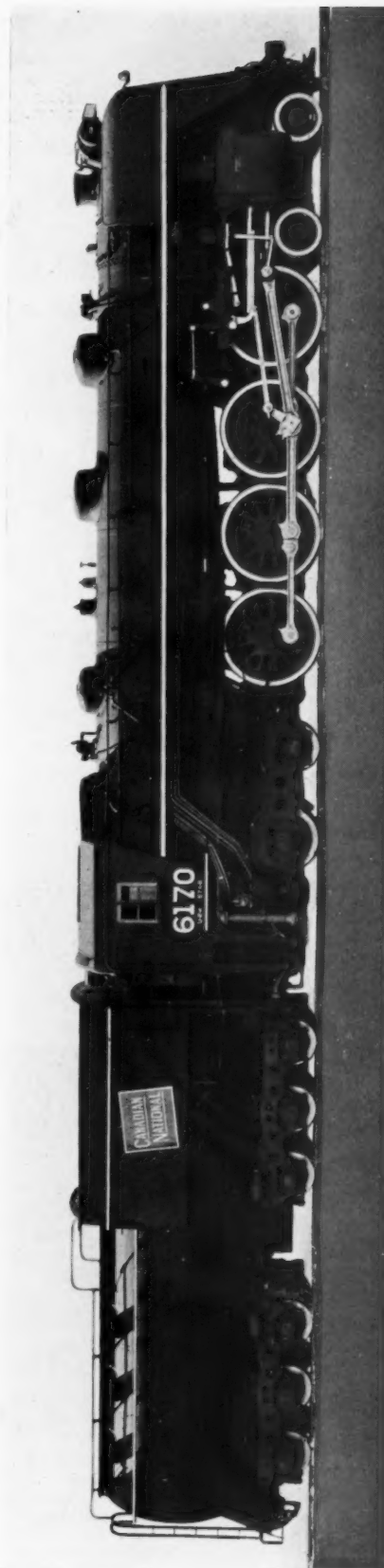
It will be remembered that air raid warnings were few and hand torches universal last winter, and, with that experience, it occurred to me that the names of stations could be printed in a size too small to be seen from the highway and yet be sufficiently legible for passengers to read them, provided they knew where to find them. Inch lettering was tried in several combinations of colouring, and the station selected as an experiment was Chislehurst last June. It was intended that these small station names should form a frieze all along the station at eye level and that passengers by using their torches in the blackout would only have to cross the platform at any point to find one of these signs.

However, the stringent regulations prohibiting the use of torches during air raids restricted the value of these signs to daylight, where they do assist the public to know where they are, particularly as they are always to be found in the four corners of the large blanked out station name sign boards. Something more, however, was required after dark, and, after careful study of the conditions, it occurred to me that the most practical form of additional station signing during the blackout would be to erect a lighted sign at right-angles to the track under the covered way, so as to come within the existing regulations. Such a sign could then be seen by anyone leaning out of almost any carriage window, the exceptions being at each end of a really long train, and, of course, the one compartment directly opposite the sign. It is interesting to realise that practically all station name signs hitherto have always been placed parallel with the track.

An experimental sign was therefore put in hand and the General Manager of the Southern, Mr. E. J. Missenden, realising its possibilities, arranged for the Minister of Transport, Sir John Reith, and the Chairman of the Railway Executive Committee, Sir Ralph Wedgwood, to inspect it at Leatherhead. Meeting with universal approval, as being something more than had yet been attempted, and at the same time coming within the present lighting restrictions, these signs are now to be made as rapidly as possible, and provided at the busier stations of the Southern Railway. In comparison with the other signs, most of which are of paper, and which have been provided for wartime conditions, these new lighted signs are, of course, expensive. I can see no reason, however, why they should not be of real value after the war, in which case their provision is fully justified.

## NEW 4-8-4 TYPE LOCOMOTIVES, CANADIAN NATIONAL RAILWAYS

**W**E announced in THE RAILWAY GAZETTE of April 26 that the Canadian National Railways then had on order twenty-five 4-8-4 type locomotives required to meet the demands of increased traffic resulting from war preparations. The contract for fifteen of the engines, equipped with boosters, was placed with the Montreal Locomotive Works Limited, and the remaining ten, not provided with boosters, were being built by the Canadian Locomotive Company, Kingston, Ontario; in both cases to the design of Mr. John Roberts, Chief of Motive Power & Car Equipment. By courtesy of Mr. William S. Morris, Vice-President of the Montreal Locomotive Works Limited, we are now able to reproduce a photograph of engine No. 6170 of the booster-equipped series. The cylinders are 25½ in. dia. by 30 in. stroke; coupled wheels 6 ft. 1 in. dia.; boiler pressure 250 lb. per sq. in.; heating surface, tubes 530 sq. ft., flues 3,275 sq. ft., firebox 315 sq. ft., arch tubes 22 sq. ft., and thermic syphons 78 sq. ft., a total (evaporative) of 4,220 sq. ft. The superheating surface is 1,931 sq. ft. and the grate area 84.3 sq. ft. The engine in working order weighs 180 tons and the tender (11,600 imp. gal. of water and 18 tons of fuel) 126 tons, a combined total of 306 long tons. The maximum tractive force is 56,800 lb. or with booster (11,700 lb.) 68,500 lb. The locomotives are designed to haul loads of 100 or more wagons at lower speeds, and trains of from 50 to 75 vehicles at speeds in excess of 55 m.p.h. They are also intended for working passenger trains of 15 to 20 vehicles at from 60 to 80 m.p.h. Roller bearings are fitted to all but the coupled wheels.



New booster-equipped 4-8-4 general service locomotive, Canadian National Railways

## British Railways and the War—40



*A night scene in Aldwych tube station, London Transport, which has been used exclusively as an air raid shelter since railway traffic was discontinued on the night of September 21. The railway lines as well as the platforms provide a dormitory for Londoners during night raids. The electric conductor rails have been removed*



*Left: One of the 19 women porters who began duty at London underground stations on September 17. At present they wear white dustcoats and grey caps (as seen here), but they are to be provided with tunics and divided skirts. Right: Mr. Herbert Morrison, Minister of Home Security, with Admiral Evans, examining the unfinished track on the Central Line extension to be used as a public air raid shelter*

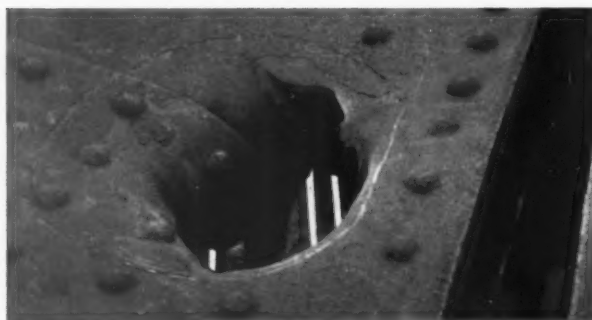




*Left: Repairing the track at a station where a high explosive bomb had fallen during the night. Right: Effect of a high explosive bomb which penetrated a timber-deck bridge and struck a heavy girder below. This girder saved from destruction valuable property underneath*



*Left: Brick viaduct damaged by the explosion of a bomb which penetrated between the tracks, leaving the latter undamaged, as seen at the top of the picture. Right: A high explosive bomb damaged the end post of a long-span girder carrying one line over another, and demolished the bedstone. The abutment was rebuilt with a new bedstone to carry the second upright from the end of the girder*



*Left: The top boom of a lattice girder bridge, carrying one line over another, penetrated by a bomb, which exploded between top and bottom booms, doing little further damage. The bridge was found not to have been weakened sufficiently to prohibit the passage at reduced speed of multiple-unit electric trains*

[Photos by Southern Railway]

#### MAINTAINING THE LINES IN AIR RAIDS

(See editorial article on page 375)

## RAILWAY NEWS SECTION

### PERSONAL

#### GOVERNMENT CHANGES

Important changes in the Government, consequent on the retirement of Mr. Chamberlain from the War Cabinet, were announced on October 3. As a result Lt.-Colonel J. T. C. Moore-Brabazon, has been appointed Minister of Transport, and Sir John Reith, former Minister of Transport, has become Minister of Works & Buildings and First Commissioner of Works.

#### CIVIL SERVICE CHANGES

Sir Thomas Gardiner, K.C.B., K.B.E., who was seconded for duty in the Ministry of Home Security on its inception, is to return to his duties as Director-General of the Post Office. He will be succeeded by Sir George Gater, C.M.G., D.S.O. (Permanent Under Secretary of State for the Colonies) now Secretary to the Ministry of Supply and formerly Joint Secretary of the Ministry of Home Security. Sir William Brown, K.C.B., K.C.M.G., C.B.E., Permanent Secretary of the Board of Trade, will be seconded for duty as Permanent Secretary of the Ministry of Supply in succession to Sir George Gater; the duties of Permanent Secretary of the Board of Trade will, during Sir William Brown's absence, be performed by Sir Arnold Overton, K.C.M.G., M.C., Second Secretary of the Board.

Sir Walter Massy-Greene, K.C.M.G., Chairman of the Emu Bay Railway Company, is to head the delegation of five technical advisors who have been appointed by the Australian Commonwealth Government to attend the Delhi Conference.

We regret to record the death on September 14, at his residence in South Croydon, of Mr. Peter V. McMahon, who retired in 1929 from the position of Superintendent of Power, Underground Electric Railways Co. of London Ltd., under the Director of Construction (Railways), Mr. McMahon was Engineer of the City & South London Railway from 1895 to 1915, and in 1916 became Superintendent of Power (Maintenance & Construction Department) of the Central London, City & South London, London Electric, and Metropolitan District Railways of the London Underground Group. On the reorganisation of departments in 1921, Mr. McMahon was given the position which he held until his retirement.

Lt.-Colonel the Rt. Hon. John Theodore Cuthbert Moore-Brabazon, M.C., M.P., who has been appointed Minister of Transport, was born in 1884, and was educated at Harrow and at Trinity College, Cambridge. He has represented the Wallasey Division in the Unionist interest in the House of Commons since 1931, and previously, from 1918 to 1929, had been Unionist member for the Chatham Division of Rochester. He acted as Parliamentary

President of the Royal Aeronautical Society in 1935. Colonel Moore-Brabazon is Deputy-Chairman of the Associated Equipment Co. Ltd. and a director of the Associated Daimler Co. Ltd., Briggs Motor Bodies Limited, Craven Brothers (Manchester) Limited, the Greyhound Racing Association Limited, the Greyhound Racing Association Trust Limited, Harringay Arena Limited, Kodak Limited, and Ultra Electric (Holdings) Limited.



Elliott

[&amp; Fry

**Lt.-Colonel J. T. C. Moore-Brabazon**

Appointed Minister of Transport

Secretary to the Ministry of Transport in 1923-24 and again from November, 1924, to 1927. He is a pioneer motorist and aviator; he won the Circuit des Ardennes motor race in 1907 and holds the first certificate for pilots granted by the Royal Aero Club. During the war of 1914-19 he served in the Royal Flying Corps and was responsible for the R.F.C. Photographic Section and the development of aerial photography. Colonel Moore-Brabazon was a member of the original Civil Aviation Committee and of Lord Weir's Advisory Committee, Chairman of the Air Mails Committee, and a Past Chairman of the Royal Aero Club. He acted as Assessor during the "R. 101" Inquiry in 1930-31 and was

We regret to record the death on September 7 of Mr. Casimir Stanislaus Gzowski, Chief Engineer (Construction), Canadian National Railways. Mr. Gzowski was born and educated in Toronto, and, after taking his degree, became Topographer and Assistant to the Divisional Engineer on the Crow's Nest Railway. He then occupied various positions in field engineering work with the Canadian Pacific Railway, with a brief interlude in 1900, when he acted as instrument expert during the improvement surveys on the Canadian Sault Ste. Marie canal. He spent some years in private practice until in January, 1919, he joined the Canadian National Railways, and in April of that year was appointed Special Engineer to the Vice-President of Operation, Maintenance, & Construction. A year later he was appointed Assistant to the Vice-President of Construction, and in March, 1923, became Chief Engineer of Construction, the position he held at the time of his death.

Mr. A. B. Chester, Divisional Engineer, Central Division, Southern Railway, has been appointed General Assistant to the Chief Engineer, to date from September 1. Mr. Chester received his engineering training at the City & Guilds Central Technical College (1907-11) obtaining the A.C.G.I., D.I.C., and B.Sc.(Eng.) London; he is also an A.M.Inst.C.E. In 1911 he joined the former L.S.W.R., as an assistant, first on new works and then on design in the head office at Waterloo. Three years later he was appointed Resident Engineer on alterations at Nine Elms, and afterwards an assistant on the original electrification of the L.S.W.R. He then enlisted as a motor cyclist despatch rider in a Signal Company, Royal Engineers, during the latter half of 1914, and was commissioned in a Field Company, R.E., in the next year; he served in France in the 512th Field Company (56th Division). In 1917 Mr. Chester was transferred to a Railway Construction Company, R.E., and

**Mr. A. B. Chester**

Appointed General Assistant to the Chief Engineer, Southern Railway

towards the end of hostilities served on the staff of the Chief Railway Construction Engineer at G.H.Q.; he was demobilised with the rank of Captain. On rejoining the L.S.W.R., he was employed on the staff of the Permanent Way Assistant at Waterloo, and was later appointed Resident Engineer of the reconstruction and reorganisation of the permanent way depot at Redbridge in 1922. This was followed by a period as Resident Engineer on various works in Hampshire, including the reconstruction of Southampton Terminus station and alterations at Bournemouth Central and Southampton West. In 1929 Mr. Chester returned to Waterloo to assist the Chief Engineer in connection with the Charing Cross bridge scheme, and two years later was appointed Assistant Divisional Engineer, London (East) Division. He remained there until July, 1936, when he was sent to Eastleigh as Acting Divisional Engineer of the Central Division, the position in which he was confirmed in January, 1937. Mr. Chester is in the Supplementary Reserve, Royal Engineers (Transportation), and for some years commanded the 156th Railway (Stores) Company, R.E. (S.R.). As a Lieutenant-Colonel of the Supplementary Reserve of officers, he was called up on the outbreak of the present war and was sent to France immediately, where he served as Assistant Director of Transportation Stores in charge of the technical stores of the

transportation services. He returned to England last June and was released by the War Office for home railway service.

Mr. W. A. Foster Graham, whose appointment as Deputy Traffic Manager of the Great Northern Railway Company (Ireland), we recorded in last week's issue, began his career in the Secretary's office of the company in 1912. He was confidential clerk to the Secretary & Assistant General Manager from 1919 to 1926, and gained much valuable experience in collecting information for the Standing Committee of General Managers of the Irish Railways which was set up in 1920. Mr. Graham also helped to prepare applications to the Irish Railways Wages Board regarding salaries and wages of railwaymen. He also acted as Clerk to the Appeals Committee of the Irish railways. He was appointed Chief Clerk to the General Manager in July, 1926, and for the next 13 years was closely associated with all important wages negotiations and acted for the company as representative on the committee set up under the Scheme of Negotiation. He also gained considerable experience in connection with the various Acts dealing with road transport in Eire and Northern Ireland, and helped to prepare railway evidence for the committees of investigation which both Governments set up to enquire into the position of public

**Mr. W. A. Foster Graham**

Appointed Deputy Traffic Manager, Great Northern Railway (Ireland)

transport. In March, 1939, Mr. Graham was appointed Assistant to the General Manager, the position he now vacates to take up that of Deputy Traffic Manager.

Sir Robert Abbott Hadfield, whose death we recorded in last week's issue, was born in Sheffield on November 28, 1858, and was educated at Sheffield Collegiate School and Firth College, Sheffield, in the latter of which he studied chemistry and metallurgy. At the conclusion of his studies he entered his father's works (Hecla Works), the Hadfield Steel Foundry Company of Attercliffe, which were founded in 1872, for the production of cast-steel hydraulic-press cylinders, wheels, and kindred engineering components. Sir Robert followed a course of training for six years and then passed through the various shops, and finally the drawing office, gaining a wealth of experience in all metallurgical work connected with the production and treatment of steel. He also paid particular attention to research work in the chemical laboratory. He held a number of positions in the management of the works and took entire control upon the death of his father in 1888. In this year the firm was incorporated as Hadfield's Steel Foundry Co. Ltd., and Sir Robert became Chairman and Managing Director. The title of the company was changed in 1913 to Hadfields Limited, which it still bears. Sir Robert decided to extend the works soon after he took charge,



[Elliott]

**The late Sir Robert Hadfield**

Metallurgical chemist, industrialist, and steelmaker

[S. Fry]



and the East Hecla works were begun in 1897, and an open-hearth steel furnace, an electric steel-making plant, a large foundry, press and steam-hammer forging shops, and rolling mills were installed. Another extension was made in 1915 when machine shops were added for the production of war munitions. His main interest was, however, chemical and metallurgical research, and before he was 30 Sir Robert was able to announce the discovery of manganese steel, a "find" which has undoubtedly revolutionised industry. Towards the end of last century he collaborated with Sir William Barrett in research upon the magnetic properties of silicon and aluminium steels. This resulted in the production of Hadfield low-hysteresis silicon steel, a material used extensively in transformers and general electrical machinery. In recognition of his work, particularly on manganese steel, Sir Robert was awarded the John Fritz Medal, the highest honour conferred by United States engineers upon their fellows, and one which has been held by only three men of British birth (the other two being Lord Kelvin and Sir William White). Sir Robert received the honour of knighthood in 1908 and a baronetcy in 1917. He became a Fellow of the Royal Society in 1909, and was an Honorary D.Sc. of Oxford and Leeds Universities, and Doctor of Metallurgy of Sheffield University. He became a Member of the Iron & Steel Institute in 1885, a Member of Council in 1890, a Vice-President in 1903, and was President from 1905-7. He was also a Member of the Institution of Civil Engineers; the Institution of Mechanical Engineers (honorary) and the Institution of Electrical Engineers. He was an original Member of the Institute of Metals, and a Fellow of the Physical Society; the Institute of Chemistry; the Chemical Society, and the Institute of Physics. He was also a Fellow or Member of many other societies and institutions. In 1904 he was awarded the Bessemer Gold Medal. Sir Robert's distinctions were very numerous, and apart from those already referred to, he was a Freeman of the City of London and of the City of Sheffield, president of the Sheffield Metallurgical Society from 1893 to 1894, of the Sheffield Society of Engineers and Metallurgists from 1894 to 1895, of the Society of British Gas Industries from 1917 to 1918, of the Faraday Society from 1914 to 1919, and of the British Commercial Gas Association in 1920. He was also Vice-President of the Federation of British Industries, the Royal Society of Arts, the British Science Guild, the British Electrical and Allied Manufacturers' Association, the Institute of Fuel, the National Gas Council, the Institute of Industrial Psychology, and hon. member, or member, of several other learned societies of the Continent and the United States. Sir Robert was Master Cutler of Sheffield in 1899-1900. He received the Institute of Civil Engineers' Howard quinquennial prize and premium in 1903, as well as George Stephenson and Telford Gold

Medals and Premiums; he was the James Forrest Lecturer in 1906, and was awarded medals by several important scientific societies. Among his recent distinctions may be mentioned the award of the Albert Medal of the Royal Society of Arts, the Bronze Medal of the Ecole des Mines de Saint Etienne in 1935, and the Trasenster Medal of the Association des Ingénieurs Sortis de l'Ecole de Liège in 1938. Sir Robert was elected an honorary member of the Société de l'Industrie Minérale, St. Etienne, and of the Norwegian Academy of Science and Letters, in 1936, and of the Institution of Civil Engineers in 1937. He was an officer of the Legion of Honour, and was raised to the distinction of *Commandeur* in 1937; he also received the Japanese Order of the Sacred Treasure.

We regret to record the death at Montreal on September 17 of Mr. R. J. Foreman, General Freight Traffic Manager, Canadian National Railways. Mr. Foreman was born at Toronto, Ont., on December 31, 1878. He entered the railway service in August, 1892, as clerk and stenographer in the office of the Superintendent of the Grand Trunk Railway at Toronto. After serving in clerical positions with the Lake Erie & Detroit River Railway, Pere Marquette Railway, Canadian Freight Association, and Grand Trunk Pacific Railway, he was appointed in January, 1911, Assistant General Freight Agent, Grand Trunk Pacific Railway, with office at Winnipeg, Manitoba. Further positions held by Mr. Foreman were those of Assistant to Vice-President, Traffic Department, Grand Trunk and Grand Trunk Pacific Railways, and Foreign Freight Agent, Grand Trunk Railway and Canadian National Railways, Montreal. Subsequently he discharged the duties of General Foreign Freight Agent, and later of Traffic Manager, Foreign Freight Department, Canadian National Railways, Montreal. On March 23 of last year he received his appointment as General Freight Traffic Manager, Montreal, the position he held at the time of his death.

Mr. Ralph R. Strother, Assistant Chief Engineer & Superintendent of Way & Structures of the Chicago, St. Paul, Minneapolis, & Omaha Railroad (a Chicago & North Western subsidiary), has been appointed Chief Engineer in succession to Mr. Chester T. Dike, whose retirement we recorded in our May 10 issue.

Mr. Harry W. Frier has been appointed Manager of the Advertising Department of the Chicago & North Western Railroad, with headquarters at Chicago. Mr. Frier was formerly with an industrial undertaking.

Mr. Hale Holden, whose death we recorded in our October 4 issue, was born in Kansas City, Mo., on August 11, 1869, and was educated at Williams College and Harvard Law School. On

leaving college he began to practise as an attorney in Kansas City, and for a number of years was a member of the firm of Warner, Dean, McLeod, & Holden, local attorneys for the Chicago, Burlington, & Quincy Railroad. In July, 1907, Mr. Holden was appointed General Attorney of this railway with headquarters at Chicago. Among the many important cases undertaken by him, was the Minnesota rate case which involved both the question of railway valuation and that of the authority of the United States Government to nullify State regulation that interfered with interstate commerce. Mr. Holden's skill in handling this matter so impressed Mr. James J. Hill that Mr. Holden was made Assistant to the President of the Chicago, Burlington & Quincy Railroad in January, 1910, and Vice-President & Director, in November, 1912. Nearly two years later, in August, 1914, he was elected President of the railway and also of the Colorado & Southern Railroad. He was also selected as one of the five members of the Railroads' War Board, the railway organisation set up when the U.S.A. joined the European war in 1917, to unify railway operations. In June, 1918, he resigned the presidency of the Burlington system to become Regional Director of the Central Western Region of the Railroad Administration, a position he held until February 15, 1920, when he resumed the position of Chief Executive of the Burlington system. On January 1, 1929, he was elected Chairman of the Southern Pacific System. Mr. Holden resigned this chairmanship in July, 1939.

#### INDIAN RAILWAY STAFF CHANGES

Mr. S. Simpson, Chief Electrical Engineer, N.W.R., has been permitted to retire from Government service as from June 15.

Mr. R. Mair has been confirmed as a Divisional Superintendent on the E.I.R.

Mr. K. C. Chaudhuri has been appointed to officiate as Deputy Chief Accounts Officer, N.W.R., as from June 29.

Sardar Bahadur S. S. Gyani has been appointed to officiate as Divisional Superintendent, N.W.R., as from June 3.

Mr. A. G. T. Glaisby has been appointed to officiate as Controller of Stores, G.I.P.R., as from July 1, vice Mr. S. H. P. Lincke, granted leave.

Mr. H. K. Koregaokar, Officiating Deputy General Manager, Works, and Secretary, E.B.R., has been granted two months' leave preparatory to retirement, as from July 15.

The services of Mr. J. Humphries, Director of Mechanical Engineering, Railway Board, have been placed at the disposal of the Department of Supply as from July 16.

Mr. L. N. Flatt, V.D., Chief Mechanical Engineer, N.W.R., has been appointed to succeed Mr. Humphries as Director of Mechanical Engineering, Railway Board, as from the same date.

## TRANSPORT SERVICES AND THE WAR—59

*Weekly losses of German raiders—Railway repair work after air raids—Deep level shelters in London—A dictator for Stepney—Protecting South African transport—Railway recruiting in Victoria—Railway A.R.P. in Eire—Continental train services*

In THE RAILWAY GAZETTE last week some details were given of the daily loss of aircraft by Germany and Great Britain. The figures then published referred to aircraft of all types and it is of some interest to segregate the losses in terms of bomber and fighter aircraft. In the table below this is done for every week from mid-July to the end of September:—

	German			British		
	Bombers	Fighters	Total	Bombers	Fighters	Total
July 15-21 ...	24	22	46	19	10	29
July 22-27 ...	28	29	57	14	9	23
July 28-Aug. 3 ...	31	16	47	20	8	28
Aug. 4-10 ...	27	42	69	13	20	33
Aug. 11-17 ...	281	214	495	31	115	146
Aug. 18-24 ...	154	89	243	11	51	62
Aug. 25-31 ...	115	179	294	15	113	128
Sept. 1-7 ...	151	192	343	17	118	135
Sept. 8-14 ...	109	77	186	31	49	80
Sept. 15-21 ...	196	72	268	10	48	58
Sept. 22-28 ...	92	133	225	9	68	77
Total ...	1,208	1,065	2,273	190	609	799

Up to the morning of October 6 a total of 2,568 enemy machines had been destroyed over and around the British Isles since the war began. The R.A.F. had lost 676 aircraft, from which 327 pilots had been saved. In the week September 29-October 5 German losses were 103 machines and those of the R.A.F. 40, from which 21 pilots were saved. The figures in the table above include losses in all theatres of war.

During the past week there have been constant enemy air raids over this country, with the exception of the night of October 6-7. Railway lines and stations have again been among the targets sought by the raiders and claimed in their communiques, but such damage as has been caused has been rapidly repaired, and the minimum of interruption of service has resulted. Efforts were made to bomb and machine-gun several trains. On October 3 a main-line train, which had left Euston shortly after midday, was reported to have been both bombed and machine-gunned when passing through a small town in the Midlands. Injuries sustained by passengers were few and slight, and the run of the train was not interfered with except for a brief stop at the next large town to the place of the attack, where the injured passengers received treatment. On the next day one or two enemy bombers, which had been driven off when attempting to attack a Welsh district, fired machine-gun bullets at, and dropped incendiary bombs on each side of, a passenger train. The driver proceeded at full speed to the next station where he found the train undamaged and the passengers safe. About midnight on October 4-5 two trains were bombed while standing in a south-eastern town. But there were no casualties. A bomb was aimed at a London train on October 7, but although it exploded not far from the track it caused no damage to the train or its passengers. On October 8 the Air Ministry and the Ministry of Home Security in a joint communique, referring to a daylight raid which had occurred that morning, stated that there had been some fatal injuries among railway passengers; a train had been hit by debris.

### Rapid G.W.R. Repair of Air Raid Damage

The Great Western Railway system has provided numerous instances of remarkable speed in effecting repairs and restoring normal working after air raid damage. Immediately bombs have fallen on any part of the system, repair staffs have been promptly on the spot fully prepared at all costs to do whatever may be necessary to make good any damage that has been caused. Problems which have had to be tackled include

extinguishing fires; clearing debris; filling bomb craters and relaying tracks; introducing emergency signalling systems pending repairs to permanent installations; repairing damaged electric cables; inspecting and repairing various structures; and providing alternative train services. A few examples of the fine work accomplished are as follow:—

(1) On a Saturday night about midnight a large high-explosive bomb dropped on a steel viaduct carrying the main line. Considerable damage was caused to a main girder and cross girders and decking on one side. As soon as daylight came, an examination was made and within a few hours working over one line was in operation.

(2) During the early afternoon of a Thursday, three high-explosive bombs were dropped on a main line, causing damage to the four running lines. Immediate action was taken by the permanent way staff to fill in the crater and bring up replacement material, with the result that working over two lines was restored in less than two hours and the remaining two lines were cleared four hours later.

(3) Just after midnight early on a Wednesday, a high-explosive bomb fell on a branch line in an isolated locality, causing severe damage to the track. Men for repair work had to be called out and materials brought from a considerable distance. Little work could be done until daylight. Notwithstanding the difficulties, the energetic and resourceful action taken resulted in one line being repaired by 4 a.m. The other line, which was severely damaged, was repaired and in use again at 9.45 a.m.

The heaviest burden in actual repair work has fallen on the Engineering and Signal Departments, but officers and staff of the other departments concerned, notably the Traffic, Docks, and Chief Mechanical Engineer's, have also played their parts admirably.

### Further Evacuation from the London Area

Government facilities for the evacuation of mothers and children have now been extended to cover the whole of the Greater London area; registration was begun on October 7. Since September 7 only some 29,000 unaccompanied school children have left London.

### Deep Level Air Raid Shelters in London

Mr. Herbert Morrison, the new Minister of Home Security, and Admiral Sir Edward Evans, Regional Commissioner for London, propose to provide air raid shelters for 1,000,000 Londoners to sleep in every night. They toured East London on Saturday (October 5), and, at the uncompleted Bethnal Green tube station on the Central Line eastward extension, Mr. Morrison gave permission for the use from that night of space where 4,000 persons might sleep 65 ft. below ground level. It is understood that the ultimate arrangements here will provide for about 10,000 persons in the uncompleted tube station and in a mile of tube tunnel running some 50 ft. underground from Bethnal Green to Liverpool Street. The station here had been used as a shelter for three nights soon after the heavy night raids on London began, but this practice was then forbidden by the London Passenger Transport Board because it was believed that there was danger of flooding. Mr. Morrison's ruling to reopen the station as a shelter was given after he had balanced the relative danger of flooding and the risk of bomb damage.

The night scene at Aldwych tube station, which was turned over for use as an air raid shelter under the control of the City of Westminster A.R.P. Services on September 21, is illustrated at page 386. On Tuesday evening (October 8) a concert was given here by E.N.S.A. to those sheltering on the platform. This was the first air raid shelter programme during a night raid given by E.N.S.A.

## NOTICE

# SHELTER

## IN UNDERGROUND STATIONS

London Transport asks those who seek shelter in Underground stations to help in maintaining the essential transport facilities which are used by roundly one million passengers daily.

Passengers must be afforded free and uninterrupted use of the platforms and stations and the space used for shelter must therefore be limited. Only the space within the white lines may be used for this purpose. The police have been instructed to enforce this arrangement and those seeking shelter are asked to help them in carrying it out.

Stations and platforms must be vacated in the early morning and before the heavy passenger traffic begins.

Only a limited amount of personal baggage, etc., will be allowed on the premises.

Stations and platforms must be kept free from litter which should be carried away or placed in receptacles provided for that purpose.

# SHELTER IN

## UNDERGROUND STATIONS

**London Transport asks you to assist in keeping the stations neat and tidy**

**Take litter away with you or place it in the litter boxes provided at the stations**



*Three posters issued during the past few days by London Transport*

LONDON TRANSPORT

On October 7 the London Passenger Transport Board announced that, with the approval of the Ministry of Home Security and the Ministry of Transport, new arrangements had been made for persons taking shelter during the night in tube stations. These arrangements are set out in the third poster reproduced above. It will be seen that the regulations comprise painting white lines on platforms and limiting obstruction in various zones; and also the prohibition of sheltering in stations before 4 p.m.

Season tickets are to be provided for those who take cover every night in London tubes and public shelters. They will be printed by the Government with blank spaces and issued to A.R.P. Controllers for local distribution.

### London Transport Emergency River Boat Service

On Saturday last (October 5) the London Passenger Transport Board announced that the London Transport emergency river boats between Westminster and Woolwich would henceforward run at approximately hourly intervals on Sunday instead of half-hourly intervals. It was added that the weekday timetable would remain unaltered. However, on Tuesday, the Parliamentary Secretary to the Ministry of Transport announced that due to lack of patronage and difficulties of operation it might be found desirable to discontinue this passenger boat service on the Thames. As we recorded at page 309 of our September 20 issue, passenger boats were introduced on September 13 between Woolwich and Westminster, calling at Brunswick for East India Dock, Greenwich, West India Dock, Tunnel (Wapping), Cherry Garden (Bermondsey), and Tower piers. The Ministry of Transport, which was responsible for the establishment of the facility, made the arrangements to help the large numbers of workers who had temporary difficulty in reaching their work by road or rail.

### Civil Defence Powers in Stepney

Orders have been issued by the Ministry of Home Security and the Ministry of Health under the Defence Regulations giving the Town Clerk all civil defence powers formerly exercised by the Stepney Borough Council and Emergency Committee. Stepney is the first borough in the country since the intensive air attacks began in which the Government has used the powers under the Defence Regulations to nominate a civil defence "dictator." Under the new scheme the Town

## NOTICE No. 2

# SHELTER

## IN UNDERGROUND STATIONS

London Transport announce that with the approval of the Ministry of Home Security and the Ministry of Transport, the following arrangements for people who take shelter during the night at Tube Stations are being made—  
In order to prevent the movement of passengers being obstructed two white lines are being painted on each platform, one 4 feet from the edge of the platform and the other 8 feet from the edge of the platform.

**NOBODY WILL BE ALLOWED TO SHELTER IN THE STATIONS BEFORE 4.0 P.M. OR RESERVE PLACES AT ANY TIME**

Between 4.0 p.m. and 7.30 p.m. sheltering will be allowed between the platform wall and the white line furthest from the platform edge and after 7.30 p.m. between the wall and the line nearest to the edge of the platform

Nobody will be allowed to shelter in any passage-way before 7.30 p.m. except in large circulating areas, where a portion will be marked off for this purpose

No collections of any kind are permitted

These arrangements are designed to enable passengers to travel freely to and from their work and homes and at the same time to make conditions for shelterers orderly. It is hoped that shelterers will co-operate with the Police and the Board in making these arrangements work smoothly.

LONDON TRANSPORT

Clerk will be able to take quicker and more direct action than was possible hitherto to deal with difficulties arising from the bombing of the borough.

### Diversion of Coal on Rail

Under an Order in Council published on October 4, consignments of coal on rail may be diverted to a new consignee if the Board of Trade is satisfied that through an actual or expected enemy attack the consignment could not reach its destination in a reasonable time, or if the diversion is expedient for the prosecution of the war or maintaining essential supplies and services. The new consignee will be responsible for charges and the price of the consignment under the contract.

### Relatives of M.N. Men in Hospital

The Railway Executive Committee has granted the Red Cross & St. John War Organisation permission to issue railway concession vouchers to relatives of merchant navy men who are in hospital as the result of enemy action. A return ticket is then issued at the cost of the single fare.

### Railway Concession for Visits to Unmarried Troops

Arrangements have been made whereby the use of railway concession vouchers are to be extended to include relatives wishing to visit unmarried members of H.M. Air Forces lying ill or wounded in hospitals in Great Britain. This concession will apply to dependent relatives of all ranks, including members of the Women's Auxiliary Air Force and Princess Mary's R.A.F. Nursing Service. Such facilities will be available for not more than two relatives on the occasion of each visit.

### Announce the Name of Your Station

The Ministry of Transport has made an appeal to the regular railway traveller in the following terms: "In the blackout many people have to travel by train who are not used to the route, and may miss their destination. The railway companies will provide as many visual indications as possible and railwaymen will do their best vocally. Will you please help by announcing to any other travellers in your compartment the name of the station at which you alight and afterwards assist, if necessary, the vocal efforts of the local railwaymen if they do not carry to the part of the train



where you happen to be? Your aid will make all the difference."

#### Station Names

IN THE RAILWAY GAZETTE of October 4 (page 367) was recorded the agreement by the Minister of Transport to the more free display of station names. The whole subject, and particularly the policy of the Southern Railway, is dealt with

## NEWTON POPPLEFORD

*Paper label with one-inch lettering for use on Southern Railway stations where larger lettering is prohibited*

in an article by Mr. C. Grasemann, Public Relations & Advertising Officer of that company, at page 383 of this week's issue. We reproduce examples of two types of label now being brought into use; one is a stencil for blacked-out

ROOM

*Stencil for blacked-out windows of lighted station rooms*

windows of lighted booking offices, and so forth, and the other a paper label with one-inch lettering for display on platforms where larger lettering is prohibited.

#### Service Charges in L.N.E.R. Hotels

The service charge of 10 per cent. in lieu of gratuities which was introduced in all L.N.E.R. restaurant cars on April 15 last, came into force throughout the L.N.E.R. hotels on Tuesday, October 1. The proceeds will be divided amongst the staff concerned. The new service charge extends to station dining rooms and tea rooms, but is not applied in cocktail and buffet bars of hotels, nor to counter sales in refreshment and tea rooms, nor to sales at kiosks. In no case is the service charge added to sales of cigarettes, cigars, and chocolate.

#### Protecting Essential Services in South Africa

South Africa has taken comprehensive steps to secure the efficient working of its essential services such as railways, ports and harbours, and has brought into being what is called the Essential Services Protection Corps. Control is vested in Defence Headquarters in Pretoria, and the Corps is divided into two main sections, namely, a Railway Regiment and a Roads Regiment. The headquarters of the Essential Services Protection Corps (Railway Regiment) are in the New station building, Johannesburg, and an article in the August issue of the *South African Railways & Harbours Magazine* stated that this vital unit, which had then begun operations only a few weeks earlier with one office and two officers, had already expanded so that it then occupied every office in one of the long corridors of this notably long building. Lt.-Colonel A. A. Stanford, Chief of Police & Investigation, S.A.R.&H., has taken over the duties of Officer Commanding, in addition to those of his normal post, and he is assisted by Lt.-Colonel W. G. Phillips (also of the S.A.R.&H. Police) as Staff Officer.

The ports and harbours concerned, although not numerous, are dotted along a coastline stretching from South West Africa to Natal. Various such places have been proclaimed Prohibited Areas, and around these barbed fences have been erected, guards provided, and a system of permits introduced to ensure that only authorised persons are able to enter. At each of the major ports there is a company of the Essential Services Protection Corps (Railway Regiment), under an Officer Commanding, who, subject to control from Headquarters, Johannesburg, is responsible for seeing that every possible precaution is taken in his area. Armed guards

are stationed at every point of entrance and important spot, and, if necessary, roads are closed to traffic to limit the number of points of ingress. Naturally, the establishment at the ports has to be fairly large, and the Cape Town unit has become so strongly established that it even runs and publishes its own monthly magazine, called *The Old Guard*, a recent issue of which, besides including several articles in both English and Afrikaans, gave some facts about the Cape Town company. Since November 15, 1939, the Commanding Officer and his Adjutants have interviewed nearly 1,000 applicants for enlistment, of whom over 500 have been medically examined, attested, and posted for duty. The average age of these Old Guards is 58.7 years, so it can be seen that there is a keenness among the older generation once more to do their bit. Of the men enlisted, eight have gained promotion to commissioned rank; four within the Corps and four in other units.

A section of the Railway Regiment, commanded by Lt.-Colonel T. G. McEwen, formerly System Engineer, Kimberley, has been organised to protect all railway bridges, power and sub-stations, signal boxes, water and coal supplies, and everything else necessary to the efficient operation of the railways. As this section deals with everything away from the coast, it has been designated the Railway Regiment—Inland. Since the outbreak of war, in September, 1939, guards have kept watch at railway bridges and other places, and these are members of the Essential Services Protection Corps. Like others who have volunteered to serve with the Forces, many of them have taken the oath to serve anywhere in Africa, and are proud of the orange flash they are entitled to wear on their shoulders. Arrangements have been made that, should guards posted at power and sub-stations (on the electrified sections of the line) and at other places where interference by unauthorised persons might cause a breakdown or impair the efficiency of the railways be overpowered or otherwise prevented from carrying out their duties, their absence from the post would not go unnoticed for long.

All men are given precise instructions about their conduct and how they must run the camps, and the orders in this connection cover such varied subjects as the correct method of disposing of rubbish, the provision of storm-water trenches, how to look after their rifles, and the best place to establish the cooking hut. The N.C.O. in charge is also given instruction in the method of allocating duties, inspecting sentries and their equipment, and protecting on-coming trains in the event of sabotage or anything affecting the safety of the bridge he is protecting.

It will readily be appreciated that large numbers of men have had to be recruited. They come from all walks of life, and the only stipulations made are that they must be medically fit for the job and that they are over the age of 45, though men over 35 are accepted provided they have been certified as unfit for the Mobile Field Force but are yet capable of performing guard duties efficiently. The condition regarding age is enforced because it is felt that the younger men should join a more active unit of the Union Defence Forces, and it is obvious that older men can perform guard duties satisfactorily. Besides recruiting officers who tour country districts, and the assistance rendered by magistrates and the Department of Labour, recruiting offices have been opened at the four major seaports and in Johannesburg. The big recruiting drive began early in June last, and it is not easy to secure large numbers of able-bodied men without interfering with the Defence Department's programme of recruiting for the Field Forces. Every inducement is offered to men to join. The pay in the case of a private (single), for instance, is 10s. a day—8s. wage and 2s. ration allowance. The ration allowance is not paid to men unless they are stationed at a post on full-time duty, i.e., it is not paid to men at Headquarters. Higher ranks are paid at proportionately higher rates. The men are also afforded an opportunity of obtaining benefits from the South African Railways & Harbours Administration's Sick Fund, and the nominal subscription of 2s. 6d. a month entitles a man to free medical attention and medicines, for himself only. Liberal provision for leave is also made, the men being allowed paid leave at the rate of one-thirtieth of their service or, roughly, one day's

paid leave every month. When circumstances justify it, they are allowed a reasonable amount of unpaid leave in addition. After only a month's service a man may be granted up to ten days' sick leave on full pay and another ten days' sick leave on half-pay in any one year, on production of a medical certificate. The stop order system has also been introduced, so that a man may provide for his family, and payment is made direct by the Administration every month. The shortest recruit so far measures 4 ft. 9½ in. in height, and the tallest 6 ft. 8½ in. with a chest measurement of 46½ in.

#### Victorian Railways Recruiting Trains

Two special recruiting trains have been equipped and placed at the disposal of the Defence Department in Australia by the Victorian Government Railways. Each train has special facilities for medical examinations and interviews of intending recruits for the Royal Australian Air Force. Six cars of the Better Farming Train have been converted into recruiting cars, three for each recruiting train, in addition to which there is a louvre truck equipped with a power unit, generator, and batteries to provide electric lighting and power in each of the trains. A general office car is divided into three sections, one with long open windows and hinged platforms on both sides of the car. Standing on these platforms recruits can make enquiries and receive literature and instructions from N.C.O.s seated at desks in the car.

The actual recruiting car consists of a large compartment equipped as a lecture room, where the duties and responsibilities of men in the R.A.A.F. are explained. From it recruits pass on to a smaller compartment fitted up as a recruiting N.C.O.s office, and in two other small compartments or cubicles the temperamental qualities and technical knowledge of potential pilots, technicians, and ground staff are closely examined by R.A.A.F. officers. In the third car are all facilities for medical examinations, including a waiting room, dark room for eye tests, and two other examination rooms.

#### Victorian Railwaymen in the Forces

By August, nearly 1,000 Victorian railwaymen had joined up in the various branches of the Australian fighting forces, and the Construction Unit, A.I.F., in which over 100 of them are serving, had safely arrived at an overseas destination.

#### British War Traffic on U.S.A. Railways

According to press reports from Weehawken (New Jersey), the extensive West Shore terminal of the New York Central Railroad is heavily engaged with war material for Great Britain, comprising such items as aircraft, motor lorries, diesel engines, and scrap iron. The report said that between 20 and 25 Douglas twin-engined bombers were being dispatched from that port every day and that this average had been maintained during the past month.

#### Railway A.R.P. in Eire

A test A.R.P. evacuation of the staff in all departments, including locomotive operating, of the Great Southern Railways at Kingsbridge, was successfully carried out on the morning of September 24. Fifty-two cellars under the main departure platforms and administrative offices have been specially equipped as shelters, with accommodation for over 1,000 persons, including staff and outsiders. The shelters are fitted with seating and lavatory accommodation, and lighted with electricity provided from storage batteries with independent switch. In addition a stock of candles has been laid in to guard against any interruptions of the electric light. Water, first aid, picks, shovels, and other supplies are also ready at hand. On hearing the air raid warning, the staff went in orderly manner to the shelters, and the process of housing 800 of them took less than three minutes. The "Raiders Past" was sounded after two minutes, and the staffs returned to work.

#### French Train Services

At the beginning of this week it was announced from Italian sources that direct railway communication between Italy and Spain *via* France was to be restored on October 8. It will be recalled that in our issue of August 16 (page 184) we recorded that regular railway communication between Italy and

France was reported to have been established on August 10. U.S.A. messages gave August 10 as also the date for the official re-establishment for rail communications from Italy and Germany to Spain across France and added that actual shipment of goods was expected to begin during the next week. It must be assumed that this transit traffic then proved impossible of achievement.

The railways in Alsace are now worked under the Reichsbahn Direktion, Karlsruhe. Since the middle of September the main line from the frontier at Wissembourg to Belfort, *via* Strasbourg, Mulhouse, and Colmar, has been open to passengers and goods traffic. The Rhine railway bridge opposite Strasbourg has not been restored; a temporary bridge is available for road traffic, and there is a bus service from Strasbourg to Kehl. The railway between Kehl and Appenweier junction on the German main line on the left bank of the river is worked as a branch line as far as Kehl.

#### Belgium and Holland

All non-military goods traffic in Belgium is still severely restricted. Goods forwarded between German and Belgian stations must be routed *via* Holland, unless special permission is given to use the direct route.

In Holland, members of the public have been asked to use the railways only in cases of absolute necessity. The severely-restricted passenger train service, operated only from day-break to 10 p.m., is to be reduced further by the suspension of all duplication of trains. The demand of goods traffic, more particularly coal, is given as the reason.

#### Transit Traffic through Poland

Since the end of August neutral sources have been reporting that Soviet Russia and Germany have been discussing tentatively the possibility of changes in their common frontier in Poland. These reports tend to confirm the indications given on many occasions in these columns that transit traffic between Germany and Russia has never been more than negligible. Meanwhile it is noted that the Communist parties continue propaganda against the Axis in the Balkans, and, according to reports reaching Angora from Moscow, the Germans are at present highly dissatisfied with the Soviet execution of trade agreements. The Russians, it is stated, explain that deliveries are difficult owing to the shortage of rolling stock.

A further indication that there has never been real agreement between Germany and Russia regarding transit traffic by railway through Poland is indicated by an announcement issued in Berlin last week by the Official German News Agency which said: "Negotiations which have been taking place in Berlin between the German Minister of Transport and representatives of the Soviet Commissariat for Transport have resulted in the conclusion of a final railway agreement between the two countries. The agreement was signed on Monday, September 30. In December last year a provisional railway agreement was concluded as the result of the German-Soviet economic negotiations. The present talks were conducted in a friendly spirit and resulted in complete agreement on all outstanding questions."

#### Double-Tracking in Roumania

A second track was recently completed on two sections of the Bucharest—Campina—Brasov line; these are from Campina to Predeal, and from Timisul to Brasov. The line had double track from Bucharest to Campina, and the only single line section now remaining is that between Predeal and Timisul.

#### Finnish-Russian Rail Link

It is reported from Moscow that since September 24 the Helsinki—Leningrad railway has been open for through traffic.

#### Railways in French Africa

A report from Lisbon indicates that railway communication is still being maintained between Algiers and Rabat, but, due to lack of petrol, motor traffic on which the country so largely depends is practically at a standstill.

#### Reduced Fares to Visit Italian War Graves

Parents and other near relations of Italian soldiers killed in action are now being granted special railway fare reductions up to 70 per cent. to enable them to visit the graves.

## NOTES AND NEWS

**Bengal & North Western Railway Co. Ltd.**—The 5 per cent. special debenture stock transfer books will be closed from October 17 to 31 inclusive, for the purpose of preparing interest warrants.

**Railway Carriage & Wagon Accessories Export Group.**—The Export Council has formally recognised this body as the export group for the railway carriage and wagon accessories industry. The Chairman is Mr. N. H. Morris, a Director of J. Stone & Co. Ltd. Applications for membership should be addressed to the Secretaries, Messrs. Peat, Marwick, Mitchell & Co., 11, Ironmonger Lane, London, E.C.2.

**Railway Negotiations at Split.**—Negotiations between a German and a Yugoslav railway commission have opened at Split, according to the Official German News Agency. Delegates representing the railway administrations of the Protectorate of Bohemia & Moravia, Slovakia, and Hungary are also participating, according to a Reuters message dated September 28.

**Irish Station Improvement Scheme.**—Goold's Cross station, on the Dublin—Cork line, has been awarded this year's first prize and cup in the championship class of the "Stations' Improvement Scheme," promoted by the Great Southern Railways Company. In 1937 and 1938 Goold's Cross obtained second place in its area competition. It won first prize in the area last year.

**Railway Agreement Deputation.**—At the Ministry of Transport on October 4, Sir John Reith fulfilled his last engagement as Minister of Transport when, together with the Parliamentary Secretary, Mr. Frederick Montague, and the Deputy Secretary, Mr. R. H. Hill, he received a deputation of representatives of the London Labour Party, the London Trades Council, and the Joint Committee of the London Co-operative Societies, who expressed the views of their respective organisations on the financial agreement with the railway companies, and stressed the importance of no action being taken

which would increase the cost of travelling by their members. The Minister stated that he was glad to have had the opportunity of hearing their views which he assured them would be fully considered before any decision was taken in the matter.

**Forestral Land Timber & Railways Co. Ltd.**—Notice is given that the whole of this company's outstanding £198,300 of 4½ per cent. ten-year registered notes will be redeemed at 102 per cent. on December 1, after which interest thereon will cease to be payable.

**Compagnia Italiana Turismo (C.I.T. England) Limited.**—A meeting of creditors will be held at the Office of the Public Trustee, Kingsway, London, W.C.2, on Monday, October 28, at 11.30 a.m.

**Ransome & Marles Bearing Co. Ltd.**—At the recent annual meeting of this company, the Chairman (Sir Albert Bennett) said that the company's products were of such universal application that it had had no serious problems with regard to cancelled contracts. While the European markets were for the time being closed to the company, the demand from other directions had increased very substantially, and with its expanding output the company hoped to establish a still greater hold on these overseas markets.

**L.M.S.R. First Aid.**—Despite the heavy wartime calls made upon the railways, the L.M.S.R. states that 8,846 of its employees have passed proficiency examinations in ambulance work during the current year. This compares with 6,183 fifteen years ago. London had 1,001 "passes"; Manchester, 715; and Derby, Nottingham, and Sheffield, 1,080. Since the formation of the L.M.S.R. ambulance centre, 4,572 long service medals have been awarded to railway employees in England, Scotland, and Wales. In view of the importance of having the maximum number of trained ambulance workers in wartime, classes are to be continued and, where possible, augmented. Among the railway first aiders are drivers, firemen, guards, porters, carriage cleaners, booking clerks, ticket collectors, and typists.

## Forthcoming Meetings

Oct. 15 (Tues.).—**Barsi Light Railway Co. Ltd.** (Ordinary general), Winchester House, Old Broad Street, E.C., at noon.

Nov. 13 (Wed.).—**Bengal Dooars Railway Co. Ltd.** (Ordinary general), Gresham House, E.C., at 12.30 p.m.

Dec. 3 (Tues.).—**Buenos Aires Central Railroad and Terminal Company (Lacroze Subway)** (Annual ordinary), Corrientes 222, Buenos Aires, at 11 a.m.

## British and Irish Railway Stocks and Shares

Stocks	Highest 1939	Lowest 1939	Oct. 8 1940	Rise/ Fall
G.W.R.				
Cons. Ord. ....	38	21½	31½	+ 3½
5% Con. Pref. ....	92	71	74½	+ 1½
5% Red. Pref. (1950) ..	98	83	93½	—
4% Deb. ....	103	91	101½	—
4½% Deb. ....	105½	93½	103½	—
4½% Deb. ....	110	99	108½	—
5% Deb. ....	121	109½	112½	—
2½% Deb. ....	63½	54	62	—
5% Rt. Charge ....	117	104	110½	—
5% Cons. Guar. ....	111	96½	103½	+ ½
L.M.S.R.				
Ord. ....	17	9½	12½	+ 1
4% Pref. (1923) ....	46½	20	34½	+ 4
4% Pref. ....	63½	37½	46	+ 3
5% Red. Pref. (1955) ..	83	58½	73½	—
4% Deb. ....	98½	85	90½	+ ½
5% Red. Deb. (1952) ..	109	101½	106	—
4% Guar. ....	87½	73	74	+ 1½
L.N.E.R.				
5% Pref. Ord. ....	5½	3½	2½	—
Def. Ord. ....	3½	1½	1½	—
4% First Pref. ....	38½	19	32½	+ 4
4% Second Pref. ....	15	7½	10	+ ½
5% Red. Pref. (1955) ..	55	38	50	—
4% First Guar. ....	78½	60	64	+ 1
4% Second Guar. ....	68½	47	53½	—
3% Deb. ....	71½	57	62½	+ 1
4% Deb. ....	93	76	82	—
5% Red. Deb. (1947) ..	106½	98	103	—
4½% Sinking Fund Red. Deb. ....	104½	96	99½	—
SOUTHERN				
Pref. Ord. ....	78	46½	42	+ 2½
Def. Ord. ....	19½	7	10	+ ½
5% Pref. ....	100	76	72	—
5% Red. Pref. (1964) ..	102½	94	87½	—
5% Guar. Pref. ....	116½	103	105	+ ½
5% Red. Guar. Pref. (1957) ....	112½	102½	103½	—
4% Deb. ....	103	91½	92½	—
5% Deb. ....	118½	109½	112½	—
4% Red. Deb. (1962- 67) ....	106	98	101½	—
4% Red. Deb. (1970- 80) ....	102	96	100½	—
FORTH BRIDGE				
4% Deb. ....	98½	81	87½	—
4% Guar. ....	95	80	85½	—
L.P.T.B.				
4½% "A" ....	115	103	106	—
5% "A" ....	123	106½	114	—
4½% "T.F.A." ....	105	100½	102	—
5% "B" ....	117½	102	102½	—
"C" ....	84	63½	26½	—
MERSEY				
Ord. ....	24½	17½	20½	—
4% Perp. Deb. ....	93½	88½	89½	—
3% Perp. Deb. ....	77	65½	50½	—
3% Perp. Pref. ....	55	49½	54½	—
IRELAND				
BELFAST & C.D.				
Ord. ....	6	3	4	—
G. NORTHERN				
Ord. ....	6	2½	2	—
G. SOUTHERN				
Ord. ....	13½	8	6	+ 1
Pref. ....	26	10	18½	—
Guar. ....	40½	22	20	—
Deb. ....	57	45½	39	—

## Irish Traffic Returns

IRELAND		Totals for 39th Week			Totals to Date		
		1940	1939	Inc. or Dec.	1940	1939	Inc. or Dec.
		£	£	£	£	£	£
Belfast & C.D. (80 miles)	pass.	3,241	2,457	+ 784	130,836	105,683	+ 25,153
	goods	849	595	+ 254	22,819	17,735	+ 5,084
	total	4,090	3,052	+ 1,038	153,655	123,418	+ 30,237
Great Northern (543 miles)	pass.	16,850	12,450	+ 4,400	484,850	454,650	+ 30,200
	goods	15,750	15,200	+ 550	499,250	410,000	+ 89,250
	total	32,600	27,650	+ 4,950	983,100	864,650	+ 118,450
Great Southern (2,076 miles)	pass.	42,578	40,504	+ 2,074	1,416,008	1,495,646	- 79,638
	goods	48,308	61,680	- 13,372	1,784,182	1,631,124	+ 153,058
	total	90,886	102,184	- 11,298	3,200,190	3,126,770	+ 73,420
L.M.S.R. (N.C.C.) (247 miles)	pass.	6,060	4,260	+ 1,800	226,710	188,950	+ 37,760
	goods	4,710	3,850	+ 860	153,450	115,820	+ 37,630
	total	10,770	8,110	+ 2,660	380,160	304,770	+ 75,390



## OFFICIAL NOTICES

Railway Carriage & Wagon Accessories  
Export Group

AT a recent Meeting of manufacturers of Railway Carriage and Wagon Accessories it was resolved to form the Railway Carriage and Wagon Accessories Export Group under the Chairmanship of Mr. N. H. Morris, a Director of J. Stone & Co. Ltd., Oceanic

House, 1A, Cockspur Street, S.W.1; and the Export Council have formally recognised this body as the Export Group for the Railway Carriage and Wagon Accessories Industry.

All manufacturers of Railway Carriage and Wagon Accessories are eligible for membership of the Export Group, and applications for membership are invited. Applications should be addressed to the Secretaries: Peat, Marwick, Mitchell & Co., 11, Ironmonger Lane, London, E.C.2.

THE INDIAN STANDARD WAGON CO. LTD. require a SPRING SHOP FOREMAN. Applicants must have wide experience in the manufacture, heat treatment and testing of laminated, volute and helical springs for railway rolling stock.—Apply by letter, stating age and whether married, and giving full details of experience to The Indian Standard Wagon Co. Ltd., Bradenham House, High Wycombe, Bucks.

## Contracts and Tenders

The North British Locomotive Co. Ltd. has received an order from the South African Railways for 73 locomotive boilers.

The Swedish State Railways are placing immediate orders for 1,500 goods wagons of 20-ton capacity, reports Reuters from Stockholm.

It is stated that this increase of rolling stock is not due to any additional traffic caused by German transit through Sweden to Norway, but that the reduction of road transport because of petrol shortage has put such a demand on the railways that the addition of 30,000 tons of wagon capacity will probably be insufficient to meet the needs.

The South Indian Railway has placed orders, to the inspection of Messrs. Robert White & Partners, with Motor Rail Limited for two 3-speed gearboxes for diesel railcars.

The Peruvian Corporation Limited has placed the following orders, which have a total value of approximately £800:—

Fishbolts: Guest, Keen & Nettlefolds Limited.

Coach screws: Bayliss, Jones & Bayliss, Limited.

Crossings: Isca Foundry Co. Ltd.

Dog spikes: Guest, Keen & Nettlefolds Limited.

According to the *Railway Age* orders were placed in the United States for 7,645 freight cars during August, the best since November, 1939, against 5,846 in July, and 315 in August, 1939. The total for the first eight months this year was 24,076, against 9,392 for the same period in 1939. August locomotive orders totalled 65 (30 steam and 35 diesel-electric) against 51 in July (11 steam and 40 diesel-electric) and only five in August, 1939, and were the largest for any month since April, 1937. The total for the eight-month period of 1940 was 301 compared with 161 for the same period last year. Orders for 102 passenger train cars were placed during August, the largest number since last December, against 36 in July, and none in August, 1939. The total for the eight months was 161 compared with 174.

On September 4 there were inquiries outstanding for, or contemplated purchases of, 54 locomotives, 7,231 freight cars and 142 passenger train cars.

During August orders were received by an American company for 22 rail motor cars and 13 passenger coach trailers for export.

The South African Railways & Harbours Administration is calling for tenders for the supply and delivery of approximately 9,550 gal. turpentine and 26,600 gal. white spirit-type 1, to B.S.S. No. 224—1936—required during the period January 1 to December 31, 1940. Tenders should reach the Chief Stores Superintendent, Purchase Section, Room 3, Park Chambers, Rissik Street, or P.O. Box 8617, Johannesburg, by 3 p.m. on October 18, 1940.

The South African Railways & Harbours Administration is calling for tenders for the supply and delivery of 55,000 yd. of unproofed all-long flax tent canvas, 27 in. wide, to the administration's specification, or alternatively, to tenderer's own sample (which must be submitted with tender). Tenders should reach the Secretary to the Tender Board, Room 31, South African Railway Headquarter Offices, or P.O. Box 7784, Johannesburg, by 1 p.m. on November 4, 1940. The standard sample showing quality, texture, and finish is held by the High Commissioner for the Union of South Africa, South Africa House, Trafalgar Square, London, W.C.2.

## Railway and Other Reports

**Bengal Doonars Railway Co. Ltd.**—A final dividend is announced of 5 per cent., subject to tax at 4s. 4d., making a total of 8 per cent., less tax, for the year ended March 31, 1940, compared with 6½ per cent., less tax, for 1938-39. Notice was given last December of the intention of the Government of India to purchase the railway on December 31, 1940.

**Costa Rica Railway Co. Ltd.**—Remittances received from the Northern Railway Company during the year ended June 30, 1940, on account of the annual sum of £137,100 receivable from that company amounted to £71,073, to which are added sundry credits bringing the total net income to £77,271. Debenture interest and other prior charges and income tax reserve require £130,133, making a net loss for the year of £52,862. Adding credit balance brought forward of £10,147 leaves a deficiency of £42,714. Negotiations now being carried on in America regarding the Northern Company's default in payments under the working agreement have not yet reached a stage when any definite scheme can be laid before the proprietors.

Staff and Labour Matters  
Officers and Crews Employed on  
L.C.C. Sludge Vessels

As the result of an award of the Industrial Court, the officers and crews of the sludge vessels of the London County Council are to receive increases in pay. The Navigators' & Engineer Officers' Union and the Transport & General Workers' Union had submitted the claims to the London County Council for:—

1. An advance of 15 per cent. in the rates of pay to meet the increased cost of living.

2. The payment of seafarers' war risk money.

3. The payment to be made when vessels go to sea short-handed,

and the difference was referred to the Court on agreed terms of reference, which asked the Court to decide whether there is any justification for alterations in the rates of pay and conditions of service of the staff and, if so, what alterations should be made. The Court, by Award No. 1,761, ruled:—

1. As from March 1, 1940, the rates of pay of the officers and crews of the vessels shall be increased by 10s. a week for officers, 5s. a week for all other ratings, except boys, and 2s. 6d. a week in the case of boys.

2. As from March 1, 1940, the decisions of the National Maritime Board in regard to seafarers' war risk money (£1 3s. 4d. a week for officers and ratings and 11s. 8d. a week for boys) shall be applied in full to officers and crews of the sludge vessels owned by the London County Council. Credit to be given for the cost of living advance (4s. a week) paid since April 1, 1940, and for all war risk money (an allowance of 2s. 6d. for masters, 2s. 3d. for other officers and ratings, and 1s. 1d. for boys for each trip running beyond the Mucking Flats) paid since March 1, 1940.

3. On and after August 26, 1940, short-hand money shall, for the period of the war, be payable after one tide.

## Carters Employed in Edinburgh and District

The National Arbitration Tribunal has recently issued its award on a dispute referred to it by the Minister of Labour regarding a claim by the Scottish Horse & Motormen's Association for an increase as from the 1st pay day in August, 1940, of 4s. a week in the wages of carters employed by the members of the Edinburgh & District Horse & Motor Owners' Association. The tribunal awards an increase of 4s. a week as from the beginning of the first full pay period after September 17, 1940.

## Railway Stock Market

In response to moderate improvement in demand, security values in most sections of the Stock Exchange were marked up earlier in the week, and although slightly easier conditions tended to develop, numerous gains were shown on balance. Encouraging views as to the war news assisted markets, and an excellent impression was created by the Prime Minister's statement that a property insurance scheme covering war damage will shortly come into force. Home railway stocks participated strongly in the better market conditions, and it was found in many instances that it was difficult to purchase in any amount at around prices indicated by current quotations. Buying was based on the very attractive yields and on expectations that an increase in fares and charges will be announced shortly. Moreover, sentiment tended to benefit from the belief that air-raid damage to the railways will be considerably less than might reasonably have been expected; and only damage in excess of £10,000,000 will have to be borne by the railways out of the net revenues guaranteed under the Government agreement. Despite the better prices made this week, yields of over 12 per cent. are still obtainable on L.M.S.R. 1923 and L.N.E.R. first

preference stocks, and an unduly large yield would also appear to be given by Southern preferred. These and other home railway securities will, however, probably continue to move very closely with the general trend on the Stock Exchange; but in the event of sustained improvement in the latter, gains in guaranteed and preference stocks might be substantial. As compared with a week ago, small rises have been shown by debenture stocks, but the yields offered still compare favourably with those on other high-class investment securities.

Improved demand was in evidence for L.M.S.R. preference issues, partly because of the high yields, and on balance the 1923 preference has rallied from 30½ to 34½; the senior preference was two points better at 45½. Moreover, L.M.S.R. ordinary appreciated a point to 12½, and at 73½ the guaranteed stock recorded a similar gain. L.M.S.R. 4 per cent. debentures were 90½, compared with 89 a week ago. Buying of L.N.E.R. first preference was reported, and on the week this stock has risen from 27½ to 32½; the second preference was half-a-point better at 10. L.N.E.R. first guaranteed was a point higher at 64½, as was the second guaranteed at 54½. The 4 per cent. debentures

at 82½, and the 3 per cent. debentures at 62½, also showed an improvement of a point on the week.

Great Western ordinary has been marked up sharply to 31½, which compares with 28 a week ago; the 5 per cent. preference showed a small improvement to 74½. On the other hand, the guaranteed stock was unchanged at 103½, as were the 4 per cent. debentures at 101½. Southern preferred, which it is generally assumed will receive its full 5 per cent. for the year, rallied from 39½ to 42; the deferred stock was slightly better at 10, and the guaranteed stock was 104½, and the 5 per cent. preference, 72. Southern 4 per cent. debentures were better and had a "middle" price of 93½. On the other hand, London Transport "C" was 26½, or a point down on balance.

Business in Argentine railway securities was very limited and mainly confined to debenture stocks, which, however, were virtually unchanged in price. A few dealings were again recorded in Indian railway issues, and elsewhere, Canadian Pacific preference further eased to 43. Canadian Pacific 4 per cent. debentures transferred around 84, and business up to 79½ was recorded in Rhodesia Railways 4½ per cent. debentures.

### Traffic Table of Overseas and Foreign Railways Publishing Weekly Returns

Railways	Miles open 1939-40	Week Ending	Traffic for Week		No. of Weeks	Aggregate Traffic to Date			Shares or Stock	Prices					
			Total this year	Inc. or Dec. compared with 1939		Totals		Increase or Decrease		Highest 1939	Lowest 1939	Oct. 8, 1940	Yield % (See Note)		
						This Year	Last Year								
South & Central America															
Antofagasta (Chili) & Bolivia	834	29.9.40	£ 21,390	—	£ 2,800	39	£ 671,590	£ 518,810	—	£ 152,780	Ord. Stk.	10½	4½	5½	Nil
Argentine North Eastern	753	28.9.40	ps. 183,300	—	ps. 1,100	13	ps. 2,283,900	ps. 2,383,500	—	ps. 99,600	"	4½	2½	2½	Nil
Bolivar	174	Aug. 1940	3,550	—	1,350	35	32,180	34,050	—	1,870	6 p.c. Deb.	7½	5½	6½	Nil
Brazil	2,801	28.9.40	ps. 1,150,000	—	ps. 75,000	13	ps. 14,479,000	ps. 16,125,000	—	ps. 1,646,000	Ord. Stk.	5½	4½	2½	Nil
Buenos Ayres & Pacific	190	10.8.40	£ 899,500	—	£ 831,600	6	£ 857,500	£ 847,500	—	£ 890,000	"	11½	4	4	Nil
Buenos Aires Central	5,082	28.9.40	ps. 1,669,000	—	ps. 210,000	13	ps. 24,385,000	ps. 24,742,000	—	ps. 357,000	Ord. Stk.	13½	4½	4½	Nil
Buenos Ayres Gt. Southern	1,930	28.9.40	ps. 624,000	—	ps. 142,000	13	ps. 8,011,000	ps. 9,054,000	—	ps. 1,043,000	"	10½	4	3½	Nil
Buenos Ayres Western	3,700	28.9.40	ps. 1,328,200	—	ps. 469,450	13	ps. 18,308,550	ps. 26,586,900	—	ps. 26,586,900	"	11½	4	4	Nil
Cent. Uruguay of M. Video	972	28.9.40	19,577	—	1,420	13	229,409	217,093	—	12,316	Ord. Stk.	2½	1½	1½	Nil
Costa Rica	188	May 1940	17,282	—	7,020	48	193,339	245,516	—	52,177	Ord. Stk.	24½	18	20	10
Dorada	70	Aug. 1940	13,300	—	900	35	98,500	109,300	—	10,800	1 Mt. Db.	104½	102	98	6½
Entre Rios	810	28.9.40	ps. 254,300	—	ps. 13,800	13	ps. 3,106,400	ps. 3,602,400	—	ps. 496,000	Ord. Sh.	6	3	1½	Nil
Great Western of Brazil	1,016	28.9.40	9,900	—	200	39	377,900	311,500	—	66,400	Ord. Sh.	3/-	1/2½	1½	Nil
International of Cl. Amer.	794	Aug. 1940	\$354,854	—	\$70,916	35	\$4,079,630	\$4,123,397	—	\$43,767	1st Pref.	7½d.	7½d.	1½	Nil
Interoceanic of Mexico	22½	Sept. 1940	8,240	—	2,485	39	60,300	55,105	—	5,195	"	2½	1½	1½	7½
La Guaira & Caracas	1,918	28.9.40	24,375	—	3,428	39	878,971	797,387	—	81,584	Ord. Stk.	2½	1½	1	Nil
Leopoldina	483	21.9.40	ps. 258,800	—	ps. 36,300	7	ps. 2,003,300	ps. 2,067,400	—	ps. 64,100	"	1½	1½	1	Nil
Mexican	319	Aug. 1940	11,140	—	2,792	9	21,363	17,490	—	3,873	"	1½	1½	1	Nil
Midland of Uruguay	386	30.9.40	6,970	—	3,689	39	135,085	87,282	—	47,803	Ord. Sh.	2½	1½	1½	7½
Nitrate	274	28.9.40	\$5,249,000	—	\$2,428,000	13	\$47,360,000	\$44,489,000	—	\$2,871,000	Pr. Lt. Stk.	45½	36	38	15½
Paraguay Central	1,059	Sept. 1940	63,848	—	2,527	13	198,447	192,214	—	6,233	Pref.	1½	1½	1½	Nil
Peruvian Corporation	100	3.8.40	£8,584	—	£5,416	5	£54,545	£58,932	—	£4,387	"	1½	1½	1½	Nil
Salvador	153½	22.9.40	29,375	—	2,600	38	1,394,712	1,228,567	—	166,145	Ord. Stk.	38	20	31	8½
San Paulo	160	July 1940	2,085	—	530	4	2,085	1,555	—	530	Ord. Sh.	1½	6/6	1½	9½
Taltal	1,353	28.9.40	16,479	—	7,889	13	204,625	238,244	—	33,619	Ord. Stk.	2	1½	1½	Nil
United of Havana	73	Aug. 1940	970	—	144	9	1,920	1,650	—	250	"	—	—	—	—
Uruguay Northern	23,695	30.9.40	1,298,205	—	205,847	39	35,683,198	28,449,187	—	7,234,011	"	74½	60	74	5½
Canada	17,153	30.9.40	1,018,800	—	178,200	39	24,369,400	21,088,800	—	3,280,600	Perp. Dbs.	100½	76	102	3½
Canadian National	—	—	—	—	—	—	—	—	—	4 p.c.	Ord. Stk.	7½	3½	5½*	Nil
Canadian Northern	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Grand Trunk	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Canadian Pacific	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
India															
Assam Bengal	1,329	30.4.40	45,187	—	6,529	4	135,060	120,437	—	14,623	Ord. Stk.	76½	60	72½	4½
Barsi Light	202	July 1940	22,762	—	13,320	18	56,587	43,395	—	13,192	"	91	84½	215	3
Bengal & North Western	2,091	Aug. 1940	204,825	—	34,908	22	1,251,276	1,076,424	—	174,852	Ord. Stk.	277	229½	240	6½
Bengal Dooars & Extension	161	July 1940	14,043	—	2,966	18	49,776	37,677	—	12,099	"	91	84½	215	3
Bengal-Nagpur	3,269	20.7.40	219,450	—	31,965	16	2,610,743	2,443,807	—	166,936	"	94½	83½	91	4½
Bombay, Baroda & Cl. India	2,986	20.9.40	254,325	—	1,200	24	4,485,825	3,970,350	—	515,475	"	108	90	104	5½
Madras & Southern Mahratta	2,967	31.7.40	152,700	—	1,977	18	2,074,489	2,057,371	—	17,118	"	104½	92	99½	7½
Rohilkund & Kumaon	571	Aug. 1940	40,125	—	5,832	22	282,833	224,369	—	58,464	"	280	263	250	6½
South Indian	2,542	20.7.40	121,599	—	10,755	16	1,390,463	1,294,081	—	96,382	"	102½	88	84½	5½
Various															
Beira	204	July 1940	83,043	—	747,446	43	747,446	—	—	—	—	—	—	—	—
Egyptian Delta	623	10.5.40	4,591	—	602	6	19,436	20,384	—	948	Prf. Sh.	1½	1½	1½	Nil
Kenya & Uganda	1,625	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manila	—	—	—	—	—	—	—	—	—	—	B. Deb.	55	39	47½	7½
Midland of W. Australia	277	June 1940	10,926	—	618	52	156,230	177,307	—	21,077	Inc. Deb.	91½	87½	82½	4½
Nigerian	1,900	27.7.40	29,016	—	2,233	18	631,889	480,613	—	151,276	"	—	—	—	—
Rhodesia	2,442	July 1940	442,978	—	43	43	3,916,232	—	—	—	—	—	—	—	—
South Africa	13,287	31.8.40	706,495	—	21,613	22	14,794,307	14,081,818	—	712,489	"	—	—	—	—
Victoria	4,774	June 1940	797,185	—	103,739	52	9,942,449	9,360,329	—	582,120	"	—	—	—	—

Note. Yields are based on the approximate current prices and are within a fraction of ½. Argentine traffic is now given in pesos.  
\* Quotation is of June 17, 1940; dealings subsequently prohibited. † Receipts are calculated @ 1s. 6d. to the rupee.